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wherein the combination of overexpression of the genes identified by said first group of cluster sequences with the underexpression of the genes identified by said second group of cluster sequences are useful in classifying good and poor prognosis primary breast tumors.

23. A polynucleotide library according to Claim 22 wherein said polynucleotide sequences or subsequences thereof of said pool correspond to any combination of at least one polynucleotide selected among those included in at least 50%, preferably 75% and more preferably 100% of the predefined sets.

24. A polynucleotide library according to anyone of Claims 1 to 23 wherein said tumor cells are breast tumor cells.

25. A polynucleotide library according to any of Claims 1 to 23 wherein said polynucleotides are immobilized on a solid support in order to form a polynucleotide array.

26. A polynucleotide library according to Claim 25 wherein the support is selected from the group comprising a nylon membrane, nitrocellulose membrane, glass slide, glass beads, membranes on glass support or a silicon chip.

27. A polynucleotide array useful for prognosis or diagnostic of tumor comprising an immobilized polynucletide library according to Claims 1 to 3.

28. A polynucleotide array useful to differentiate a normal cell from a cancer cell comprising any combination of immobilized polynucletide sequences sets according to claims 4 to 7.

29. A polynucleotide array useful to detect a hormone sensitive tumor cell comprising any combination of immobilized polynucletide sequences sets according to claims 8 to 11.

30. A polynucleotide array useful to differentiate a tumor with lymph nodes from a tumor without lymph nodes comprising any combination of immobilized polynucletide sequences sets according to claims 12 to 15.

31. A polynucleotide array useful to differentiate antracycline-sensitive tumors from antracycline-insensitive tumors comprising any combination of immobilized polynucletide sequences sets according to claims 16 to 19.

32. A polynucleotide array useful to classify good and poor prognosis primary breast tumors comprising any

combination of immobilized polynucletide sequences sets according to claim 20 to 23.

33. A method of detecting differentially expressed polynucleotide sequences which are correlated with a cancer, said method comprising:

a) obtaining a polynucleotide sample from a patient and

b) reacting said polynucleotide sample obtained in step (a) with a probe immobilized on a solid support wherein said probe comprises any combination of the polynucleotide sequences of the polynucléotide library of Claims 1 to 23 or any combination of expression products encoded by any of the polynucleotide sequences of the libraries of Claims 1 to 23 and

c) detecting the reaction product of step (b).

34. A method for detecting differentially expressed polynucleotide sequences according to Claim 33 wherein said polynucléotide sample is labeled before its reaction step.

35. A method for detecting differentially expressed polynucleotide sequences according to Claim 34 wherein the label of the polynucléotide sample is selected from the group consisting of radioactive, colorimetric, enzymatic, molecular amplification, bioluminescent or fluorescent labels.

36. A method for detecting differentially expressed polynucleotide sequences according to Claims 33 to 35 further comprising obtaining a control polynucléotide sample, reacting said control sample with said probe

detecting a control sample reaction product and comparing the amount of said polynucléotide sample reaction product to the amount od said control sample reaction product.

37. A method for detecting differentially expressed polynucleotide sequences according to Claims 33 to 36 wherein the polynucléotide sample is cDNA, RNA or mRNA.

38. A method for detecting differentially expressed polynucleotide sequences according to Claim 37 wherein mRNA is isolated from said polynucléotide sample and cDNA is obtained by reverse transcription of said mRNA.

39. A method for detecting differentially expressed polynucleotide sequences according to Claims 33 to 38 wherein said reaction step is performed by hybridising the polynucleotide sample with the probe.

40. A method for detecting differentially expressed polynucleotide sequences according to Claims 33 to 39 wherein said method is used for detecting, diagnosing, staging, monitoring, predicting, preventing or treating conditions associated with cancer.

41. A method for detecting differentially expressed polynucleotide sequences according to Claims 33 to 40 wherein the cancer is breast cancer.

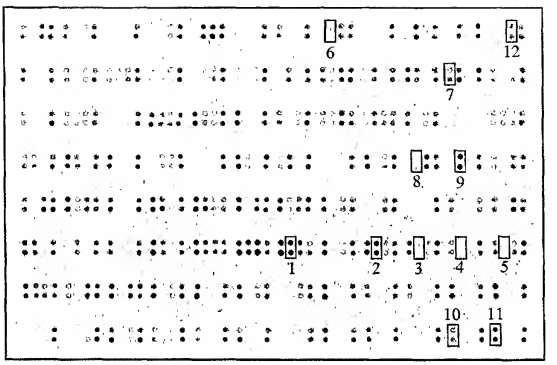
42. A method for detecting differentially expressed polynucleotide sequences according to Claims 33 to 41 wherein the product encoded by any of the polynucleotide sequences or polynucleotide sequences sets is involved in a receptor-ligand reaction on which detection is based.

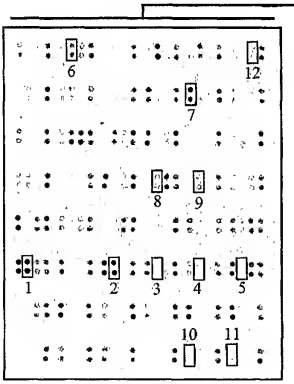
43. A method for screening an anti-tumor agent comprising the method of Claim 33 wherein said polynucléotide sample is obtained from a patient treated with the anti-tumor agent to be screened.

Figure 1

Figure 1A

Normal Breast





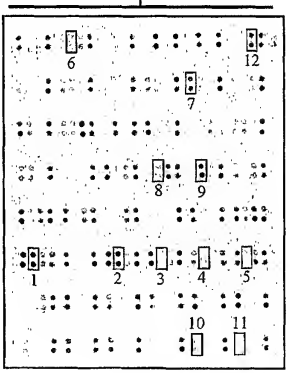


Figure 1B ER- ER+ Figure 1C

Breast cancer

Figure 2

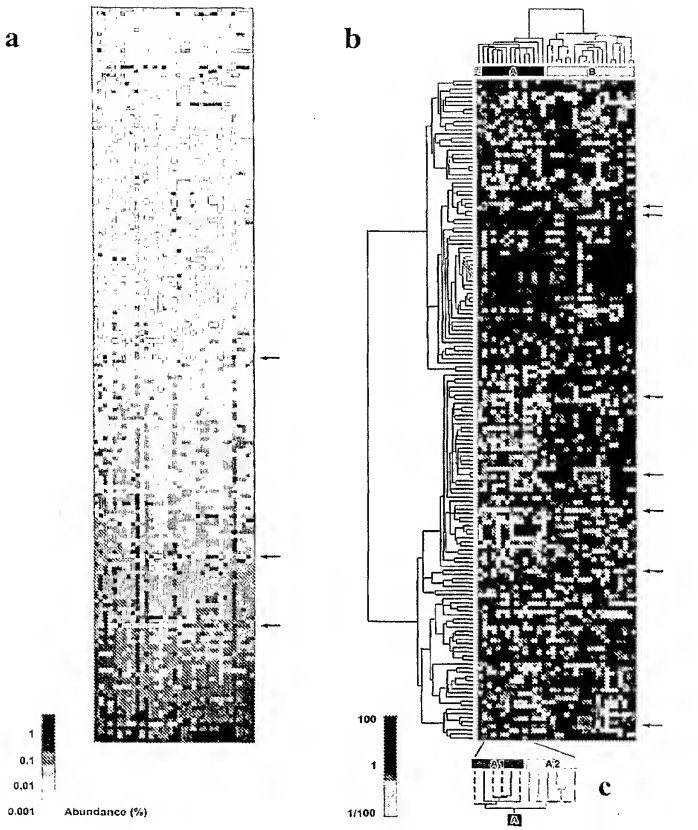


Figure 3

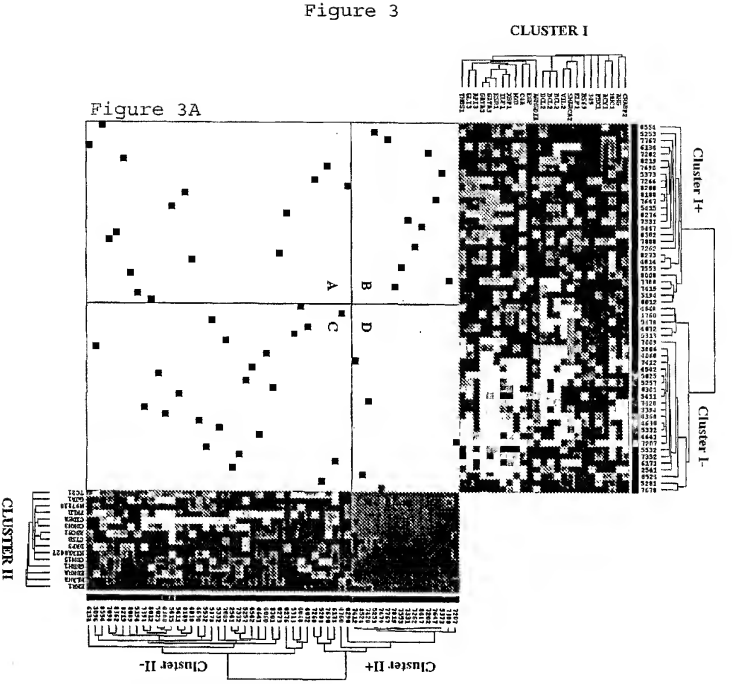


Figure 3A

Figure 3C

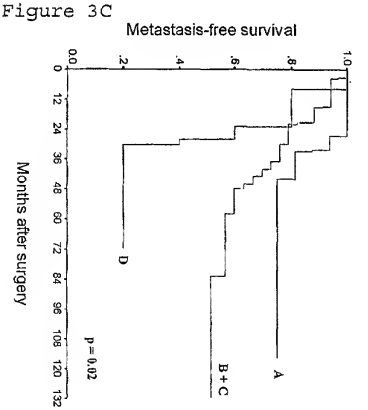


Figure 3B

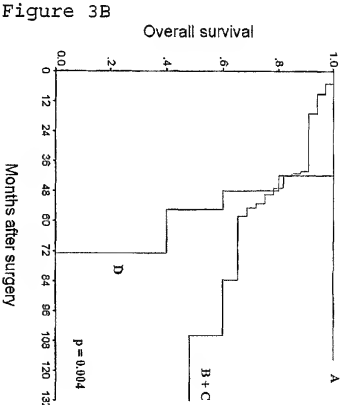


Figure 4

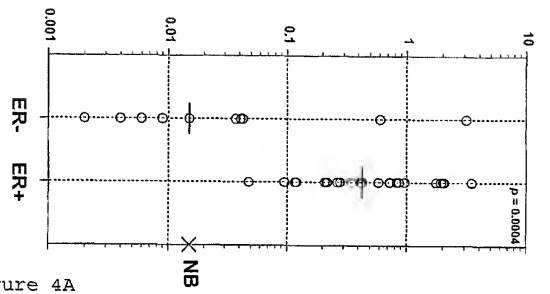


Figure 4A

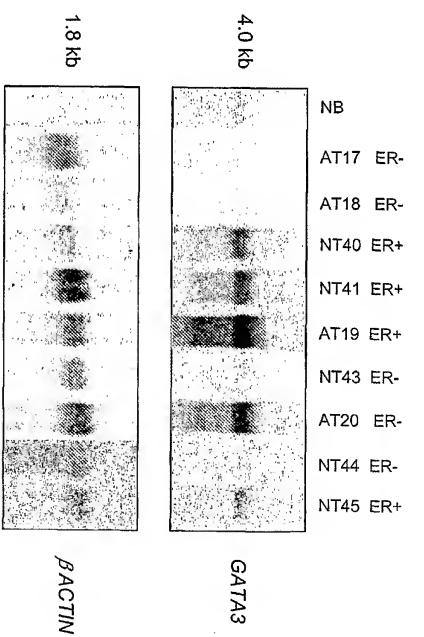


Figure 4B

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<110> François Bertucci
Rémi Houlgatte
Daniel Birnbaum
Catherine Nguyen
Patrice Viens
Fert, vincent

<120> cDNA arrays and their use for gene expression profiling.

<130> 10813PCT-December-2001-ipsogen

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<141> 2001-12-07

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ttttatccct aaataatttc aatttttaaa aacatgcagc ttccctctcc ccttttttat 300 0
ttttgaaaga atacatttgg tcataaagtg aaacccgtat tagcaagtac gaggcaatgt 3060
tcattccaat cagatgcagc tttctcctcc gtctggtctc ctgtttgcaa ttgcttccct 3120
catctcagta gggaaaaaat tgagtgggag tactgagatg tgtgggtttt tgccattgga 3180
caaagaatga ggttagaaga ctgcagcttg gagtctct ct aggttttcaa ctatttcttc 3240
acaatttgaa cacttgacgg ttgtcccttt taatttattt gaagtgctat ttttttaaat 3300
aaaggttcat ctgtccatgc aaaaaaa 3327

<210> 7
<211> 300
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(300)
<223> 3' terminal sequence. ests, weakly similar
to alu7_human alu subfamily sq sequence
contamination warning entry [h.sapiens] (EST
T81919) gene.

<400> 7
tncaagagac agggttnngc acattgccca ggatggtctc aaactcctag agttgagcta 60
tccacccacc tttggcctnc caaagtgctg ggatcacagg cgtgagtcac tgtntccagc 120
acccatctgg aggcttctta aagcccaggc cccacgccga gcttctgagt caataaagaa 180
gtctgcattt ctaacaagct tctaggggat gctgctgctg ctgctggtcc aggggcccca 240
ctttgaagaa ccactgcact gggtntttcc tctgggaccc gaatgcctgt gcttctcccc 300

<210> 8
<211> 369

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(369)
<223> 5' terminal sequence. ests, weakly similar
to alu7_human alu subfamily sq sequence
contamination warning entry [h.sapiens] (EST
T81919) gene.

<400> 8
cctaacgcag gtttcccccgc aaatgactgg tcacgcggga ctgaacaccg cacaggcagg 60
aggcatggca agggtaagtg aa ctgaagca ctttcaatac ttcctaccta accgcgggct 120
ttccctccga gtaatgcgta aaatgggacc acgtggccca ctcctgtttt tcctcttggg 180
ctctccacgt gccactcatg cttggaagag acagatttct ttctaggata aagatctctg 240
ccccatttct gtcttttaaa atggagaatt ctttaaagaa gtagggacag cttncagggt 300
cagggcagtt tgggaaagtn acaggggcct aattgtgttc cgtggaaacn ggggtaggag 360
gtttgcttt 369

<210> 9
<211> 255
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(255)
<223> 3' terminal sequence. cyclin d1 (pradl:
parathyroid adenomatosis 1) (CCND1) gene.

<400> 9
aaagacagtt tttgggtaat cttttncttt tgcttaagtc agagatggaa gggggaaaga 60
gcaaaggaaa aaacaaccaa caacaaggag aatgaagctt tcccttctgg tatcaaaatg 120
ctccggagag gagggactnt cagtggagca cctggggccg gctccgcctc gctgcgggtg 180
gcggtggcgc ccctngcctg gcgccttcag atgtccacgt cccgcacgtc ggtgggtntg 240
caagccaggt ccacc 255

<210> 10
<211> 1325
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1325)
<223> cyclin d1 (pradl: parathyroid adenomatosis
1) (CCND1) gene.

<400> 10

gcagtagcag cgagcagcag agtccgcac g ctccggcgag gggcagaaga gcgcgaggga 60
gcgcggggca gcagaagcga gagccgagcg cggacccagc caggacccac agccctcccc 120
agctgcccag gaagagcccc agccatggaa caccagctcc tgtgctgcga agtggaaacc 180
atccgccgcg cgtaccccga tgccaacctc ctcaacgacc gggtgctgcg ggccatgctg 240
aaggcggagg agacctgcgc gccctcggtg tcctacttca aatgtgtgca gaaggaggtc 300
ctgccgtcca tgcggaagat cgtcgccacc tggatgctgg aggtctgcga ggaacagaag 360
tgcgaggagg aggtcttccc gctggccatg aactacctgg accgcttcct gtcgctggag 420
cccgtgaaaa agagccgcct gcagctgctg ggggccactt gcatgttcgt ggcctctaag 480
atgaaggaga ccatcccccc gacggccgag aagctgtgca tctacaccga cggctccatc 540
cggcccgagg agctgctgca aatggagctg ctcctggtga acaagctcaa gtggaacctg 600
gccgcaatga ccccgcacga tttcattgaa cacttcctct ccaaaatgcc agaggcggag 660
gagaacaaac agatcatccg caaacacg cg cagaccttcg ttgcctcttg tgccacagat 720
gtgaagttca tttccaatcc gccctccatg gtggcagcgg ggagcgtggt ggccgcagtg 780
caaggcctga acctgaggag ccccaacaac ttcctgtcct actaccgcct cacacgcttc 840
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gccctgctgg agtcaagcct gcgccaggcc cagcagaaca tggaccccaa ggccgccgag 960
gaggaggaag aggaggagga ggaggtggac ctggcttgca cacccaccga cgtgcgggac 1020
gtggacatct gaggggccca ggcaggcggg cgccaccgcc acccgcagcg agggcggagc 1080
cggccccagg tgctccacat gacagtccct cctctccgga gcattt tgat accagaaggg 1140
aaagcttcat tctccttgtt gttggttgtt ttttcctttg ctctttcccc cttccatctc 1200
tgacttaagc aaaagaaaaa gattacccaa aaactgtctt taaaagagag agagagaaaa 1260
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1320
aaaaa 1325

<210> 11
<211> 449
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(449)
<223> 5' terminal sequence. signal transducer and
activator of transcription 1, 91kd (STAT1) gene.

<400> 11
atttgaaagt caaagtctta tttgataaag atgtgaatga gagaaataca gtaaaaggat 60
ttaggaagtt caacattttg ggcacgcaca caaaagtgat gaacatggag gagtccacca 120
atggcagtct ggcggctgaa tttcggcacc tgcaattgaa agaacaga aa aatgctggca 180
ccagaacgaa tgagggtcct ctcatcgtta ctgaagagct tcactccctt agttttgaaa 240
cccaattgtg ccagcctggg tttggtaatt gacctcgaga cgacctctct gcccgttgtg 300
ggtgatctcc aacgtcagcc agctcccgag cggttggggc ctccattcct ttgggtacaa 360
catgctgggt nggcgggaac ccgggg antc tgttccttnt ttcctggact ccaccatgtg 420
ncacggtggg gtttcagntt ttcagaagt 449

<210> 12
<211> 4003
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(4003)

<223> signal transducer and activator of transcription 1, 91kd (STAT1) gene.

<400> 12

attaaacctc tcgccgagcc cctccgcaga ctctgcgccg gaaagtttca tttgctgtat 60
gccatcctcg agagctgtct aggttaacgt tcgcactctg tgtataataac ctcgacagtc 120
ttggcaccta acgtgctgtg cgtagctgct cctttggttg aatccccagg cccttgttgg 180
ggcacaaggt ggcaggatgt ctcagtggta cgaacttcag cagcttgact caaaattcct 240
ggagcaggtt caccagcttt atgatgacag ttttcccatg gaaatcagac agtacctggc 300
acagtggtta gaaaagcaag actgggagca cgctgccaat gatgttt cat ttgccaccat 360
ccgttttcat gacctcctgt cacagctgga tgatcaatat agtcgctttt ctttggagaa 420
taacttcttg ctacagcata acataaggaa aagcaagcgt aatcttcagg ataattttca 480
ggaagaccca atccagatgt ctatgatcat ttacagctgt ctgaaggaag aaaggaaaat 540
tctggaaaac gcccagagat ttaat caggc tcagtcgggg aatattcaga gcacagtgat 600
gttagacaaa cagaaagagc ttgacagtaa agtcagaaat gtgaaggaca aggttatgtg 660
tatagagcat gaaatcaaga gcctggaaga tttacaagat gaatatgact tcaaatgcaa 720
aaccttgcag aacagagaac acgagaccaa tggtgtggca aagagtgatc agaaacaaga 780
acagctgtta ctcaagaaga tgtatttaat gcttgacaat aagagaaagg aagtagttca 840
caaaataata gagttgctga atgtcactga acttacccag aatgccctga ttaatgatga 900
actagtggag tggaagcgga gacagcagag cgcctgtatt ggggggccgc ccaatgcttg 960
cttggatcag ctgcagaact ggttcactat agttgcggag agtct gcagc aagttcggca 1020
gcagcttaaa aagttggagg aattggaaca gaaatacacc tacgaacatg accctatcac 1080
aaaaaacaaa caagtgttat gggaccgcac cttcagtctt ttccagcagc tcattcagag 1140
ctcgtttgtg gtggaaagac agccctgcat gccaacgcac cctcagaggc cgctggtctt 1200
gaagacaggg gtccagttca ctgtgaagtt gagactgttg gtgaaattgc aagagctgaa 1260
ttataatttg aaagtcaaag tcttatttga taaagatgtg aatgagagaa atacagtaaa 1320
aggatttagg aagttcaaca ttttgggcac gcacacaaaa gtgatgaaca tggaggagtc 1380
caccaatggc agtctggcgg ctgaatttcg gcacctgcaa ttgaaagaac agaaaaatg c 1440
tggcaccaga acgaatgagg gtcctctcat cgttactgaa gagcttcact cccttagttt 1500
tgaaacccaa ttgtgccagc ctggtttggt aattgacctc gagacgacct ctctgcccgt 1560
tgtggtgatc tccaacgtca gccagctccc gagcggttgg gcctccatcc tttggtacaa 1620
catgctggtg gcggaaccca ggaatctgtc ctt cttcctg actccaccat gtgcacgatg 1680
ggctcagctt tcagaagtgc tgagttggca gttttcttct gtcaccaaaa gaggtctcaa 1740
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tctcattccg tggacgaggt tttgtaagga aaatataaat gataaaaatt ttcccttctg 1860
gctttggatt gaaagcatcc tagaactcat taaaaaacac ctgctccctc tctggaatga 1920
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gccggggacc ttcctgctgc ggttcagtga gagctcccgg gaaggggcca tcacattcac 2040
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gaagaaagaa ctttctgctg ttactttccc tgacatcatt cgcaattaca aagtcatggc 2160
tgctgagaat attcctgaga atcccctgaa gtatctgtat ccaaatattg acaaagacca 2220
tgcctttgga aagtattact ccaggccaaa ggaagcacca gagccaatgg aacttgatgg 2280
ccctaaagga actggatata t caagactga gttgatttct gtgtctgaag ttcacccttc 2340
tagacttcag accacagaca acctgctccc catgtctcct gaggagtttg acgaggtgtc 2400
tcggatagtg ggctctgtag aattcgacag tatgatgaac acagtataga gcatgaattt 2460
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tccttcacat cctgtgtttc tagggaaatg aaagaaaggc cagcaaattc gctgcaacct 2580
gttgatagca agtgaatttt tctctaactc agaaacatca gttactctga agggcatcat 2640
gcatcttact gaaggtaaaa ttgaaaggca ttctctgaag agtgggtttc acaagtgaaa 2700
aacatccaga tacacccaaa gtatcaggac gagaa tgagg gtcctttggg aaaggagaag 2760
ttaagcaaca tctagcaaat gttatgcata aagtcagtgc ccaactgtta taggttgttg 2820
gataaatcag tggttattta gggaactgct tgacgtagga acggtaaatt tctgtgggag 2880
aattcttaca tgtttttctt gctttaagtg taactggcag ttttccattg gtttacctgt 2940
gaaatagttc aaagccaagt ttatatacaa ttatatcagt cctctttcaa aggtagccat 3000
catggatctg gtagggggaa aatgtgtatt ttattacatc tttcacattg gctatttaaa 3060
gacaaagaca aattctgttt cttgagaaga gaatattagc tttactgttt gttatggctt 3120
aatgacacta gctaatatca atagaaggat gtacatttcc aaattcaca a gttgtgtttg 3180
atatccaaag ctgaatacat tctgctttca tcttggtcac atacaattat ttttacagtt 3240
ctcccaaggg agttaggcta ttcacaacca ctcattcaaa agttgaaatt aaccatagat 3300
gtagataaac tcagaaattt aattcatgtt tcttaaatgg gctactttgt ccttttgtt 3360
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ctgacaactt gaataataca ccagagataa tatgagaatc agatcatttc aaaactcatt 3480
tcctatgtaa ctgcattgag aactgcatat gtttcgctga tatatgtgtt tttcacattt 3540
gcgaatggtt ccattctctc tcctgtactt tttccagaca ctttttgag tggatgatgt 36 00
ttcgtgaagt atactgtatt tttacctttt tccttcctta tcactgacac aaaaagtaga 3660
ttaagagatg ggtttgacaa ggttcttccc ttttacatac tgctgtctat gtggctgtat 3720
cttgtttttc cactactgct accacaacta tattatcatg caaatgctgt attcttcttt 3780
ggtggagata aagatttctt gagttttgtt ttaaaat taa agctaaagta tctgtattgc 3840
attaaatata atatcgacac agtgctttcc gtggcactgc atacaatctg aggcctcctc 3900
tctcagtttt tatatagatg gcgagaacct aagtttcagt tgattttaca attgaaatga 3960
ctaaaaaaca aagaagacaa cattaaaaac aatattgttt cta 4003

<210> 13
<211> 167
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(167)
<223> 3' terminal sequence. fibroblast growth
factor receptor 2 (bacteria-expressed kinase,
keratinocyte growth factor receptor, craniofacial
dysostosis 1, crouzon syndrome, pfeiffer syndrome,
jackson-weiss syndrome) (FGFR2) gene.

<400> 13
ccacctctgc tcggtgaaaa ttaagaaatt atgtgtaaga acagcattta gcaaatagct 60
attaaaaaaa gagagaccaa ttttctag gt gcattgggac atccatttaa antcaataca 120
aaaaataact ccttgtaaat ntataatata ttatttatac ntaattt 167

<210> 14
<211> 414
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(414)
<223> 5' terminal sequence. fibroblast growth
factor receptor 2 (bacteria-expressed kinase,
keratinocyte growth factor receptor, craniofacial
dysostosis 1, crouzon syndrome, pfeiffer syndrome,
jackson-weiss syndrome) (FGFR2) gene.

<400> 14
ggacacagaa tggataagcc agccaactgc accaacgaac tgtacatgat gatgagggac 60
tgttggcatg cagtgcctcc cagagaccaa cgttcaagca gttggtagaa gacttggatc 120
gaattctcac tctcacaacc aatgaggaat acttggacct cagccaacct ctcgaacagt 180
attcacctag ttaccctgac ac aagaagtt cttgttcttc aggagatgat tctgtttttt 240
ctccagaccc catgccttac gaaccatgcc ttcctcagta tccacacata aacgggcagt 300
gttttaaaac atgaatgact gtgtctggcc tgtnccccaa acagggacag gcactggggg 360
aacctaggct acattnaggc aggggaggac ccttgccttc ccaggngttt gttt 414

<210> 15
<211> 4667
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(4667)
<223> fibroblast growth factor receptor 2
(bacteria-expressed kinase, keratinocyte growt h
factor receptor, craniofacial dysostosis 1,
crouzon syndrome, pfeiffer syndrome, jackson-weiss
syndrome) (FGFR2) gene.

<400> 15
gagcgggcga gggagcgcgc gcggccgcca caaagctcgg gcgccgcggg gctgcatgcg 60
gcgtacctgg cccggcgcgg cgactgctct c cgggctggc gggggccggc cgcgagcccc 120
gggggccccg aggccgcagc ttgcctgcgc gctctgagcc ttcgcaactc gcgagcaaag 180
tttggtggag gcaacgccaa gcctgagtcc tttcttcctc tcgttcccca aatccgaggg 240
cagcccgcgg gcgtcatgcc cgcgctcctc cgcagcctgg ggtacgcgct gaagcccggg 300
aggcttggcg ccggcgaaga cccaaggacc actcttctgc gtttggagtt gctccccaca 360
accccgggct cgtcgctttc tccatcccga cccagccggg gcgcggggac aacacaggtc 420
gcggaggagc gttgccattc aagtgactgc agcagcagcg gcagcgcctc ggttcctgag 480
cccaccgcag gctgaaggca ttgcgcgtag tccatgcccg tagaggaagt g tgcagatgg 540
gattaacgtc cacatggaga tatggaagag gaccggggat tggtaccgta accatggtca 600
gctggggtcg tttcatctgc ctggtcgtgg tcaccatggc aaccttgtcc ctggcccggc 660
cctccttcag tttagttgag gataccacat tagagccaga agagccacca accaaatacc 720
aaatctctca accagaagtg tacgtggctg cgccagggga gtcgctagag gtgcgctgcc 780
tgttgaaaga tgccgcccgtg atcagttgga ctaaggatgg ggtgcacttg gggcccaaca 840
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gcctctatgc ttgtactgcc agtaggactg tagacagtga aacttggtac ttcatggtga 960
atgtcacaga tgccatctca tccggagatg atgaggatga caccgatggt gcggaagatt 1020
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aaaagcggct ccatgctgtg cctgcggcca acactgtcaa gtttcgctgc ccagccgggg 1140
ggaacccaat gccaaccatg cggtggctga aaaacgggaa ggagttt aag caggagcatc 1200
gcattggagg ctacaaggta cgaaaccagc actggagcct cattatggaa agtgtggtcc 1260
catctgacaa gggaaattat acctgtgtgg tggagaatga atacgggtcc atcaatcaca 1320
cgtaccacct ggatgttgtg gagcgatcgc ctcaccggcc catcctccaa gccggactgc 1380
cggcaaatgc ctccacagtg g tcggaggag acgtagagtt tgtctgcaag gtttacagtg 1440
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tgaagaacac gaccaagaag ccagacttca gcagc cagcc ggctgtgcac aagctgacca 1860
aacgtatccc cctgcggaga caggtttcgg ctgagtccag ctcctccatg aactccaaca 1920
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gaattgacaa agacaagccc aaggaggcgg tcaccgtggc cgtgaagatg ttgaaagatg 2160
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ggaaacacaa gaatatcata aatcttcttg gagcctgcac acaggatgg g cctctctatg 2280
tcatagttga gtatgcctct aaaggcaacc tccgagaata cctccgagcc cggaggccac 2340
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atcagagtga tgtctggtcc ttcgggtgt taatgtggga gatcttcact ttaggggct 27 00
cgccctaccc agggattccc gtggaggaac tttttaagct gctgaaggaa ggacacagaa 2760
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gttatcctga cccaagatga aataaaacgt ctctcttccc ttctttcagg aatacttgga 3000
cctcagccaa cctctcgaac agtattcacc tagttaccct gacacaagaa gttcttgttc 3060
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aggacagcac tgggaaccta gctacactga gcagggagac catgcctccc agagcttgtt 3240
gtctccactt gtatatatgg atcagaggag taaataattg gaaaagtaat cagcatatgt 3300
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ggagaagatt tatgtcagca cacacttaca gagcacaaat gcagtatata ggtgctggat 3540
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tttgtattga ttttaaatgg atgtcccaat gcacctagaa aattggtctc tctttttta 3660
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ggaaaaatac ttttgctttc agggaaaatg gtataacgtt aatttattaa taaattggta 3780
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ggcagcacag cagactagtt aatctattgc ttggacttaa ctagttatca gatcctttga 3900
aaagagaata tttacaatat atgactaatt tggggaaaat gaagttttga tttatttgtg 3960
tttaaatgct gctgtcagac gattgttctt agacctcct a aatgccccat attaaaagaa 4020
ctcattcata ggaaggtgtt tcattttggt gtgcaaccct gtcattacgt caacgcaacg 4080
tctaactgga cttcccaaga taaatggtac cagcgtcctc ttaaaagatg ccttaatcca 4140
ttccttgagg acagacctta gttgaaatga tagcagaatg tgcttctctc tggcagctgg 4200
ccttctgctt ctg agttgca cattaatcag attagcctga ttctcttcag tgaattttga 4260
taatggcttc cagactcttt gcgttggaga cgcctgttag gatcttcaag tcccatcata 4320
gaaaattgaa acacagagtt gttctgctga tagttttggg gatacgtcca tctttttaag 4380
ggattgcttt catctaattc tggcaggacc tcaccaaaag atccagcctc at acctacat 4440
cagacaaaat atcgccgttg ttccttctgt actaaagtat tgtgttttgc tttggaaaca 4500
cccactcact ttgcaatagc cgtgcaagat gaatgcagat tacactgatc ttatgtgtta 4560
caaaattgga gaaagtattt aataaaacct gttaattttt atactgacaa taaaaatgtt 4620
tctacagata ttaatgttaa caagaca aaa taaatgtcac gcaacttt 4667

<210> 16
<211> 483
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(483)
<223> 3' terminal sequence. ests (EST T89980)
gene.

<400> 16
gtgttgagct cccaaaaggc ttaaaacttg ctttgtgaat gaatgatctt aaatcactag 60
tgaagatgat catggggcat ttgcacatta aagaactaaa atgaaatgaa aaagccatga 120
ctcctcactt aatgctatta aaaaaaaatc tgatttggta aattaacccc acttctcata 180
gtttaattgg gtaatcaacg ttcttgggaa ttc aggttct catgggcacc ctaatagtgt 240
ttagggccgg gggtcctgag gctgctgggg gtgatcccga ggaacaagaa gctgccctat 300
taaaagtaat ctacttgagt ttttcccgag tctttgggag ttgttcccta ctgtgggggct 360
acttatagggg gtagggcccc ccaaatccct cacacttagg tcggccctgc tggcttgctg 420
tggggctctg aaangcagcc gctaggangt ccccaagcct naacttaccc attttctggc 480

ctg 483

<210> 17
<211> 400
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(400)
<223> 3' terminal sequence. protein phosphatase 3
(formerly 2b), catalytic subunit, gamma isoform
(calcineurin a gamma) (PPP3CC) gene.

<400> 17
ntttatatat attgaacata aattaaaaga atttataaaa cagccacctt tttacagaat 60
aaatgcagac tgaattataa atgcacctcc acgttgaagt tgttttgagt tgcttttcat 120
tttccaataa taaataaata gaatttgttc ttgagtttta gatccacctg agccacggca 180
ggactctaag tcatgaatgg gctttcttcc cttggtcgct cctgtgcgca gatgntgagt 240
gtgctgaggt tacagatttc attggcccac cagcgtgtat gc tatccttt cgggggtggg 300
cattcgctca ttaattcggg cccagnccct cgcgctttct ttcaaaactc cgggatcttg 360
tgcntggagg cgaggnaccc ctctgatggg cttcccgggg 400

<210> 18
<211> 490
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(490)
<223> 5' terminal sequence. protein phosphatase 3
(formerly 2b), catalytic subunit, gamma isoform
(calcineurin a gamma) (PPP3CC) gene.

<400> 18
cttggagcac tatacccaca acactgtccg agggtgctct tatttctaca gttaccctgc 60
agtttgtgaa tttttgcaga acaataattt actatcaatt atcagagccc atgaagccca 120
agatgctggg tatcgaatgt acaggaagag ccaagccaca ggttttccat cacttattac 180
aattttctct gcccccaatt acctagatgt ctataacaat aaagctgctg tgttgaaata 240
tgaaaacaat gtcatgaata tcaggcagtt taactgttct ccacacccct actgggcttc 300
caaactttat gggatgtttt cacatgggtc tttgcctttt gttgggggga ccccgnacac 360
agaggatggc tgggtaaatg tggntcaaca ttatggntct ggatggacgg aactgatttt 420
ctggatggat ggaagcngga tgggaaggca cttacngttt cgtaagggng g ttcttcggg 480
gnttaggttc 490

<210> 19
<211> 2134
<212> DNA/RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2134)
<223> protein phosphatase 3 (formerly 2b),
catalytic subunit, gamma isoform (calcineurin a
gamma) (PPP3CC) gene.

<400> 19
gggccaccct tagcagcggt cgcggtcggt gccgaagcgg tgttccccgc cttagccgct 60
gcgcctccca agagagcggc cggtgggccc tcgtcctgtc agtggcgtcg gaggc cggcc 120
tgcggtggcc gcgcccttct ggtgctcgga caccgctgag gagccggggc cgggcacggc 180
tggctgacgg ctccgggcag ctaaggctgc ccgaggagaa ggcggccgcc gcggcgtagg 240
cgcacgtccg gcgggctcct ggagcctgga ggaggccgag gggaccatgt ccgggaggcg 300
cttccacctc tccaccaccg accgcgtcat caa agctgtc ccctttcctc caacccaacg 360
gcttactttc aaggaagtat ttgagaatgg gaaacctaaa gttgatgttt taaaaaacca 420
tttggtaaag gaaggacgac tggaagagga agtagcctta aagataatca atgatggggc 480
tgccatcctg aggcaagaga agactatgat agaagtagat gctccaatca cagtatgtgg 540
tgatattcat ggacaattct ttgacctaat gaagttattt gaagttggag gatcacctag 600
taacacacgc tacctctttc tgggtgacta tgtggacaga ggctatttca gtatagagtg 660
tgtgctgtat ttatggagtt taaagattaa tcatcccaaa acattgtttc tgcttcgggg 720
aaatcatgaa tgcaggcatc ttacagacta tttcaccttc aaacaggaat gtc gaatcaa 780
atattcggaa caggtgtatg atgcctgtat ggagacattt gactgtcttc ctcttgctgc 840
cctcttaaac cagcagtttc tctgtgtaca tggaggaatg tcacctgaaa ttacttcttt 900
agatgacatt aggaaattag acaggtttac ggaacctccc gcctttggac ctgtgtgtga 960
cctgctttgg tctgatccct cagaggatta t ggcaatgag aagaccttgg agcactatac 1020
ccacaacact gtccgagggt gctcttattt ctacagttac cctgcagttt gtgaattttt 1080
gcagaacaat aatttactat caattatcag agcccatgaa gcccaagatg ctgggtatcg 1140
aatgtacagg aagagccaag ccacaggctt tccatcactt attacaattt tctctgcccc 1200
caattaccta gatgtctata acaataaagc tgctgtgttg aaatatgaaa acaatgtcat 1260
gaatatcagg cagtttaact gttctccaca cccctactgg cttccaaact ttatggatgt 1320
tttcacatgg tctttgcctt ttgttgggga aaaagtcaca gagatgctgg taaatgtgct 1380
caacatatgc tctgatgacg aactgatttc tgatgatgaa gcaga aggaa gcactacagt 1440
tcgtaaggag atcatcagga ataagatcag agccattggg aagatggcac gggtcttttc 1500
aattcttcgg caagaaagtg agagtgtgct gactctcaag ggcctgactc ccacaggcac 1560
actccctctg ggcgtcctct caggaggcaa gcagactatc gagacagcca tcagagggtt 1620
ctcgcttcag cacaagatcc ggagttttga agaagcgcga ggtctggacc gaattaatga 1680
gcgaatgcca ccccgaaagg atagcatata ccctggtggg ccaatgaaat ctgtaacctc 1740
agcacactca catgctgcgc acaggagcga ccaagggaag aaagcccatt catgacttag 1800
agtcctgccg tgctcaggtg gatctaaaac tcaagaacaa attctattta tttattatt g 1860
gaaaatgaaa agcaactcaa aacaacttca acctggaggt gcatttataa ttcagtctgc 1920
atttattctg taaaaaggtg actgttttat aaattctttt aatttatgtt caatatatat 1980
aaaaagtgca tctgttttgt ttttcccttt tttctccata attttaagaa atgaatctga 2040
ttgttgtcaa cacatttgtg aagtcttgtg cta taaaggg gaacttcccc taataaaagg 2100
gccttggaaa cctcaaacct gggtttctga cccc 2134

<210> 20
<211> 248
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(248)
<223> 3' terminal sequence. ests (EST T90726)
gene.

<400> 20
atccatttat tatatccaat gctaaacact accacttgga ctctaagata tgtttatgcc 60
tctctgttta ttctagtttt ttaaaaatca aatatacaag atctacaatt atttatatcc 120
aagatgtcta caccactgcc taagaagcta ttaaaatat t tgtatttgtg caatggnacc 180
cattattcac atgggcctag gattaaaaag tcaatttata ttgngaataa atttntccaa 240
aaaaacca 248

<210> 21
<211> 427
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Art ificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(427)
<223> 5' terminal sequence. ests (EST T90726)
gene.

<400> 21
taagatacga acgagaaacc tgatttattg ctcatccttc ccttgcctcc ctaatggcaa 60
gcaaaactct gaacatctga aaaggatgta gttctggaca aatcct gact acccagagga 120
aactcactgt gagattgctg ttgatttgaa gggtgctttc actaaggtta tattttaaag 180
tagaataaca catgctgagt gtaaactggg ctttggattg gtcagctgca gtagtacaaa 240
aacagcatag aatttgagga aaactaaaac tgctatgaga taggctatga ggaaaactta 300
aaactggcta tgtggtagga aatg atgtta aanttatgtg gggaaagttt ttcccctccn 360
tattacttca cattacaggc ctttngaggg gcntctgggc tctgnacccn gtttgatggg 420
cctttga 427

<210> 22
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(294)
<223> 3' terminal sequence. sry (sex determining
region y)-box 4 (SOX4) gene.

<400> 22
tttcttgttt ttcttttttt ttttccgaaa ccactcgccc tccactgact gcccctgtac 60
cacatcaaac agtctcctct cctccacgcc tccggggtct gggaagtctc acctcactga 120
tttcacgtag aaaagaaggc ggaggccagc agccgcgcgc ncaagctccc caacgtgcaa 180
atccatttca gtttgaccgt gaacccccct ccagttcgtg tcctcctccg cccccgcccc 240
tagctcccgc tgctggnttc caacggggtt ntcgggtcat ttcctagcgc cggt 294

<210> 23
<211> 362
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(362)
<223> 5' terminal sequence. sry (sex determining
region y)-box 4 (SOX4) gene.

<400> 23
ttccggactt gtctgcaccc ccagcaagaa ggcgagttag ttttctagag acttgaagga 60
gtctcccect tcctgcatca ccaccttggt tttgttttat tttgcttctt ggtcaagaaa 120
ggaggggaga acccagcgca cccctccccc ctttttttaa acgcgtgatg aagacagaag 180
gctccggggt gacgaatttg gccgatggag nat gttttgg gggaacgccg ggactgagag 240
actccacggc agggcgaatt cccgtttggg gcttttttt tcctccctct ttttcccctt 300
gcccctttg canccggngg agggagntgt tnaaggggag ggagggccag ccagtgttga 360
cc 362

<210> 24
<211> 2797
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2797)
<223> sry (sex determining region y) -box 4 (SOX4)
gene.

<400> 24
ttccccagca ttcgagaaac tcctctctac tttagcacgg tctccagact cagccgagag 60
acagcaaact gcagcgcggt gagagagcga gagagaggga gagagagact ctccagcctg 120
ggaactataa ctcctctgcg agaggcggag aactccttcc ccaaatcttt tggggacttt 180
tctctcttta cccacctccg cccctgcgag gagttgaggg gccagttcgg ccgccgcgcg 240
cgtcttcccg ttcggcgtgt gcttggcccg gggaaccggg agggcccggc gatcgcgcgg 300
cggccgccgc gagggtgtga gcgcgcgtgg gcgcccgccg agccgaggcc atggtgcagc 360
aaaccaacaa tgccgagaac acggaagcgc tgctggccgg cgagagctcg gactcgggcg 420
ccggcctcga gctgggaatc gcctcctccc ccacgcccgg ctccaccgcc t ccacgggcg 480
gcaaggccga cgacccgagc tggtgcaaga ccccgagtgg gcacatcaag cgacccatga 540
acgccttcat ggtgtggtcg cagatcgagc ggcgcaagat catggagcag tcgcccgaca 600
tgcacaacgc cgagatctcc aagcggctgg gcaaacgctg gaagctgctc aaagacagcg 660
acaagatccc tttcattcga gaggcggagc ggctgcgcct caagcacatg gctgactacc 720
ccgactacaa gtaccggccc aggaagaagg tgaagtccgg caacgccaac tccagctcct 780
cggccgccgc ctcctccaag ccgggggaga agggagacaa ggtcggtggc agtggcgggg 840
gcggccatgg gggcggcggc ggcggcggga gcagcaacgc ggggggagga ggcggcggtg 900
cgagtggcgg cggcgccaac tccaaaccgg cgcagaaaaa gagctgcggc tccaaagtgg 960
cgggcggcgc gggcggtggg gttagcaaac cgcacgccaa gctcatcctg gcaggcggcg 1020
gcggcggcgg gaaagcagcg gctgccgccg ccgcctcctt cgccgccgaa caggcggggg 1080
ccgccgccct gctgcccctg ggcgccgccg ccgaccacca ctcgctgt ac aaggcgcgga 1140
ctcccagcgc ctcggcctcc gcctcctcgg cagcctcggc ctccgcagcg ctcgcggccc 1200
cgggcaagca cctggcggag aagaaggtga agcgcgtcta cctgttcggc ggcctgggca 1260
cgtcgtcgtc gcccgtgggc ggcgtgggcg cgggagccga ccccagcgac cccctgggcc 1320
tgtacgagga ggagggcgcg gg ctgctcgc ccgacgcgcc cagcctgagc ggccgcagca 1380
gcgccgcctc gtccccgcc gccggccgct cgcccgccga ccaccgcggc tacgccagcc 1440
tgcgcgccgc ctcgcccgcc ccgtccagcg cgccctcgca cgcgtcctcc tcggcctcgt 1500
cccactcctc ctcttcctcc tcctcgggct cctcgtcctc cgacgacgag ttcgaagacg 1 560
acctgctcga cctgaacccc agctcaaact ttgagagcat gtccctgggc agcttcagtt 1620

cgtcgtcggc gctcgaccgg gacctggatt ttaacttcga gcccggctcc ggctcgcact 1680
tcgagttccc ggactactgc acgcccgagg tgagcgagat gatctcggga gactggctcg 1740
agtccagcat ctccaacctg gttttcacct actgaa gggc gcgcaggcag ggagaagggc 1800
cgggggggt aggagaggag aaaaaaaaag tgaaaaaaag aaacgaaaag gacagacgaa 1860
gagtttaaag agaaaaggga aaaaagaaag aaaaagtaag cagggctcgt tcgcccgcgt 1920
tctcgtcgtc ggatcaagga gcgcggcggc gttttggacc cgcgctccca tcccccacct 1980
tcccgggccg gggacccact ctgcccagcc ggagggacgc ggaggaggaa gagggtagac 2040
aggggcgacc tgtgattgtt gttattgatg ttgttgttga tggcaaaaaa aaaaagcgac 2100
ttcgagtttg ctccccttg cttgaagaga ccccctcccc cttccaacga gcttccggac 2160
ttgtctgcac ccccagcaag aaggcgagtt agttttctag agacttgaag gagtctcccc 2220
cttcctgcat caccaccttg gttttgtttt attttgcttc ttggtcaaga aaggagggga 2280
gaacccagcg caccctccc ccccttttt taaacgcgtg atgaagacag aaggctccgg 2340
ggtgacgaat ttggccgatg gcagatgttt tgggggaacg ccgggactga gagactccac 2400
gcaggcgaat tcccgtttgg ggcc ttttt tcctccctct tttccccttg ccccctctgc 2460
agccggagga ggagatgttg aggggaggag gccagccagt gtgaccggcg ctaggaaatg 2520
acccgagaac cccgttggaa gcgcagcagc gggagctagg ggcgggggcg gaggaggaca 2580
cgaactggaa gggggttcac ggtcaaactg aaatggattt gcacgttggg gagctggcgg 264 0
cggcggctgc tgggcctccg ccttcttttc tacgtgaaat cagtgaggtg agacttccca 2700
gaccccggag gcgtggagga gaggagactg tttgatgtgg tacaggggca gtcagtggag 2760
ggcgagtggt ttcggaaaaa aaaaaagaaa aaaaggg 2797

<210> 25
<211> 352
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(352)
<223> 5' terminal sequence. ring finger protein 5
(RNF5) gene.

<400> 25
acgggggccc caacnanant cgcgagcngg gcgtggcggg cgcgaccttc gaatgt anta 60
tatgtttgga gactgctcgg gaagctgtgg tcagtgtgtg tggccacctg tactgttggc 120
catgtcttca tcagtggctg gagacacggc cagaacggca agagtgtcca gtatgtaaag 180
ctgggatcag cagagagaag gttgtcccgc tttatgggcg agggagccag aagccccagg 240
atcccagatt aaaaactcca ccccgccccc aggcc agaga ccagctccgg agagcagagg 300
gggattccag ccatttggtg ataccggggg cttccacttn ttcatttggt gt 352

<210> 26
<211> 543
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(543)
<223> ring finger protein 5 (RNF5) gene.

<400> 26
atggcagcag cggaggagga ggacgggggc cccgaagggc caaatcgcga gcggggcggg 60
gcgggcgcga ccttcgaatg taatatatgt ttggagactg ctcgggaagc tgtggtcagt 120

gtgtgtggcc acctgtactg ttggccatgt cttcatcagt ggctggagac acggc cagaa 180
cggcaagagt gtccagtatg taaagctggg atcagcagag agaaggttgt cccgctttat 240
gggcgaggga gccagaagcc ccaggatccc agattaaaaa ctccaccccg cccccagggc 300
cagagaccag ctccggagag cagaggggga ttccagccat ttggtgatac cggggcttc 360
cacttctcat ttggtgttgg tgcttttccc ttt ggctttt tcaccaccgt cttcaatgcc 420
catgagcctt tccgccgggg tacaggtgtg gatctgggac agggtcaccc agcctccagc 480
tggcaggatt ccctcttcct gtttctcgcc atcttcttct ttttttggct gctcagtatt 540
tga 543

<210> 27
<211> 397
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(397)
<223> 3' terminal sequence. axl receptor tyrosine
kinase (AXL) gene.

<400> 27
gccgtggggt gggaaagtgg gaag gtggag ttttccccag tggcagtgct tagcttggat 60
cctgagaggg agtaccaggt ggagggttgt ctcaggcacc atcctcctgc cctgggctgc 120
tggggagccc ctatcagcag gctgagcggg gctaggggtt ttggaagggc agaggacata 180
gcntccagca ggatggacct cagccgcagt naggcagcta caggaatcct tagggtctgg 240
ctgggttggg gggtcagctc ctcctgcagc tccaggggnt tcaggataac ctccaccctc 300
atccatnttn acatagagga tttcgtcagg ctcctggggc aggangcaan gcctttcagt 360
ntgttctcca aatcttcccn caactctnta aaacttt 397

<210> 28
<211> 418
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(418)
<223> 5' terminal sequence. axl receptor tyrosine
kinase (AXL) gene.

<400> 28
ctgaatgaga acatgtccgt gtgtgtggcg gacttcgggc tctccaagaa gatctaca at 60
ggggactact accgccagga ccgtatcgcc aagatgccag tcaagtggat tgccattgag 120
agtctagctg accgtgtcta caccagcaag agcgatgtgt ggtccttcgg ggtgacaatg 180
tgggagattg ccacaagagg ccaaacccca tatccggggc gtggagaaca gcgagattta 240
tgantatctg cgccagggaa atcgcctgaa gcagcct ncg gactgtcttg gatgggantg 300
ttatgccttg atgttcgcgg tncttgggga gcttaaattc cccaggggnc ccgnccaatt 360
ttttacaaag cttncgggga agatttttgg gagnacacac ttttaagggc tttncctt 418

<210> 29
<211> 5015
<212> DNA/RNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(5015)
<223> axl receptor tyrosine kinase (AXL) gene.

<400> 29
gagtggagtt ctggaggaat gtttaccaga cacagagccc agagggacag cgcccagagc 60
ccagatagag agacacggcc tcactggctc agcaccaggg tccccttccc cctcctcagc 120
tccctccctg gccccttaa gaaagagctg atcctctcct ctcttgagtt aacccctgat 180
tgtccaggtg gcccctggct ctggcctggt gggcggaggc aaaggggaag ccaggggcgg 240
agaaagggtt gcccaagtct gggagtgagg gaaggaggca ggggtgctga gaaggcggct 300
gctgggcaga gccggtggca agggcctc cc ctgccgctgt gccaggcagg cagtgccaaa 360
tccggggagc ctggagctgg ggggagggcc ggggacagcc cggcccgctg ccccctcccc 420
cgctgggagc ccagcaactt ctgaggaaag tttggcaccc atggcgtggc ggtgccccag 480
gatgggcagg gtcccgctgg cctggtgctt ggcgctgtgc ggctgggcgt gcatggcccc 540
cagggcacg caggctgaag aaagtccctt cgtgggcaac ccagggaata tcacaggtgc 600
ccgggactc acggcaccc ttcggtgtca gctccaggtt cagggagagc cccccgaggt 660
acattggctt cgggatggac agatcctgga gctcgcggac agcacccaga cccaggtgcc 720
cctgggtgag gatgaacagg atgactggat agtggtcagc cagctcag aa tcacctccct 780
gcagctttcc gacacgggac agtaccagtg tttggtgttt ctgggacatc agaccttcgt 840
gtcccagcct ggctatgttg ggctggaggg cttgccttac ttcctggagg agcccgaaga 900
caggactgtg gccgccaaca ccccttcaa cctgagctgc caagctcagg gaccccaga 960
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ccataacgcc aaggggtca ccacatcccg cacagccacc atcacagtgc tcccccagca 1140
gccccgtaac ctccacctgg tctcccgcca acccacggag ctggaggtgg cttggactcc 1200
aggcctgagc ggcatctacc ccctgaccca ctgcaccctg caggctgtgc tgtcagacga 1260
tgggatgggc atccaggcgg gagaaccaga ccccccagag gagcccctca cctcgcaagc 1320
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aggtcacata aaactttgta tatcaacgaa aaaaa 5015

<210> 30
<211> 439
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(439)
<223> 5' terminal sequence. cathepsin b (CTSB)
gene.

<400> 30
aacacgtcac cggagagatg atgggtggcc atgcatccgc atcctgggct ggggagtgga 60
gaatggcaca ccctactggc tgg ttgccaa ctcctggaac actgactggg gtgacaatgg 120
cttctttaaa atactcagag gacaggatca ctgtggaatc gaatcagaag tggtggctgg 180
aattccacgc accgatcagt actgggaaaa gatctaatct gccgtgggcc tgtcgtgcca 240
gtcctggggg gcgagatcgg ggtagaaatg cattttattc tttaagttca cgttaaggat 300
acaagttttc agacagggtc tgaaagggan tgggatttng gccaaacatc agacctgttc 360
tttcccaagg gaggaccaag ttcctgggct aacattcccc agcctnttgg tttaacagtt 420
gncaggacag ggccntgtt 439

<210> 31
<211> 1996
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1996)
<223> cathepsin b (CTSB) gene.

<400> 31
tccggcaacg ccaaccgctc cgctgcgcgc aggctgggct gcaggctctc ggctgcagcg 60
ctgggctggt gtgcagtggt gcgaccacg g ctcacggcag cctcagccac ccagatgtaa 120
gcgatctggt tcccacctca gcctcccgag tagtggatct aggatccggc ttccaacatg 180
tggcagctct gggcctccct ctgctgcctg ctggtgttgg ccaatgcccg gagcaggccc 240
tctttccatc ccctgtcgga tgagctggtc aactatgtca acaaacggaa taccacgtgg 300
caggccgggc acaacttcta caacgtggac atgagctact tgaagaggct atgtggtacc 360
ttcctgggtg ggcccaagcc accccagaga gttatgttta ccgaggacct gaagctgcct 420
gcaagcttcg atgcacggga acaatggcca cagtgtccca ccatcaaaga gatcagagac 480
cagggctcct gtggctcctg ctgggccttc ggggctgtgg aagccatct c tgaccggatc 540
tgcatccaca ccaatgcgca cgtcagcgtg gaggtgtcgg cggaggacct gctcacatgc 600
tgtggcagca tgtgtgggga cggctgtaat ggtggctatc ctgctgaagc ttggaacttc 660
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tactccatcc ctccctgtga gcaccac gtc aacggctccc ggccccccatg cacgggggag 780
ggagataccc ccaagtgtag caagatctgt gagcctggct acagcccgac ctacaaacag 840
gacaagcact acggatacaa ttcctacagc gtctccaata gcgagaagga catcatggcc 900
gagatctaca aaaacggccc cgtggaggga gctttctctg tgtattcgga cttcctgctc 960
tacaagtcag gagtgtacca acacgtcacc ggagagatga tgggtggcca tgccatccgc 1020
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gaatcagaag tggtggctgg aattccacgc accgatcagt actg ggaaaa gatctaatct 1200
gccgtgggcc tgtcgtgcca gtcctggggg cgagatcggg gtagaaatgc attttattct 1260
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gacaggccat gtgagccac c gctgccagca cagagcgtcc ttccccctgt agactagtgc 1440
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ctgacccact gatctctact accacaagga aaatagttta ggagaaacca gcttttactg 1920
tttttgaaaa attacagctt caccctgtca agttaacaag gaatgcctgt gccaataaaa 1980
ggtttctcca acttga 1996

<210> 32
<211> 492
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(492)

<223> 3' terminal sequence. protein phosphatase 4
(formerly x), catalytic subunit (PPP4C) gene.

<400> 32
ttccattttt cttcttttat tagaattttt tcatttttt tctcaaaatt tttatctaaa 60
aacaaacaga aaaaagaagg aaaaaaagaa aaaaaaatta ttggaaactt catggttcaa 120
gtggggagag aggaggagga acatggagct aggtctccag gcctctccag agaagtcctc 180
accctcgaag caccctcttg ggggacagca gagccagg ga cagccccccc ccacgcccag 240
cctccgtctg agggaagatg ggcagagtca cagtgggtgc gaggggccag aagggttggg 300
aggngggcag gggcgggcgg ggtcacagga agtagttcgg ccacggcttt ctttgggagg 360
gggatncccc gtgtcttctt ttgggggagc agccttcaaa gatgatgaaa tctttttctt 420
gggagatgct tcgttc cagc ttnccaagat tggcttncca cattttccca cagcggtaca 480
agttagtttt tg 492

<210> 33
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(330)
<223> 5' terminal sequence. protein phosphatase 4
(formerly x), catalytic subunit (PPP4C) gene.

<400> 33
ctnttcatgg gggactttgt ggaccgtggc ttctatagcg tcgaaacgtt nctnctgctg 60
ctggcactta aggttcgcta tcctgatcgc atcacactga tccgggg caa ccatgagagt 120
cgccagatca cgcaggtcta tggcttctac gatgagtgcc tgcgcaagta acggctcggt 180
gactgtgtgg cgctactgca ctgagatctt tgactacctc agcctgtcag ccatcatcga 240
tngaaagaat cttctgcgtg cacggggcgc tctccccctc catccagacc ctgggatcca 300
gattcggaca atcgaccgaa agcaa gaggt 330

<210> 34
<211> 1429
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1429)
<223> protein phosphatase 4 (formerly x),
catalytic subunit (PPP4C) gene.

<400> 34
gccacgaagg ccggagagcc ggaaccggag tcgcagcggc ggagacccct gtgcggtgcg 60
gaggggcgcgg cggccccgac tctgacccgc gccgggggtg ggccatggcg gagatcagcg 120
acctggaccg gcagatcgag cagctgcgtc gctgcgagct catcaaggag agcgaagtca 180
aggccctgtg cgctaaggcc agagagatct tggtagagga gagcaacgtg cagagggtgg 240
actcgccagt cacagtgtgc ggcgacatcc atggacaatt ctatgacctc aaagagctgt 300
tcagagtagg tggcgacgtc cctgagacca actacctctt catgggggac tttgtggacc 360
gtggcttcta tagcgtcgaa acgttcctcc tgctgctggc acttaaggt t cgctatcctg 420
atcgcatcac actgatccgg ggcaaccatg agagtcgcca gatcacgcag gtctatggct 480

tctacgatga gtgcctgcgc aagtacggct cggtgactgt gtggcgctac tgcactgaga 540
tctttgacta cctcagcctg tcagccatca tcgatggcaa gatcttctgc gtgcacgggg 600
gcctctcccc ctccatccag accctgg atc agattcggac aatcgaccga aagcaagagg 660
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ggggcgtgag cccccgagga gccggctacc tatttggcag tgacgtggtg gcccagttca 780
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tgttcctcct cctctctccc cacttgaacc atgaagtttc caataatttt tttttctttt 1260
tttccttctt ttttctgttt gtttttagat aaaaattttg agaaaaaaaa tgaaaaaatt 1320
ctaataaaag aagaaaaatg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa 1429

<210> 35
<211> 493
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(493)
<223> 3' terminal sequence. ests (EST T79867)
gene.

<400> 35
ttttttgcc acttcagctc caaaggtgaa acggcacagt taaaagcaag aaattttgtg 60
tcccttcccc aagctagctt tggaa taaat ccacttttct tgtaccagac cccactcttg 120
ttaattggac tctacatgtg gnaagcaact aacttgattt tcggttacaa tataatattc 180
aacttcagta aatcaaagac aattttgaaa gaagccaaag ggaaaaaaat gacctgaaga 240
gtcctgttta antttagatt tctgaacaca aatctctggc gactaggact gaagcttgac 300
ctnttcctac ccaggacccn ttcccacctc actagggnac tttggantgg gatatatgtg 360
gggaaactct tgggctttcc ccattgtggc accatttcat atcttatggc aaatggtgcc 420
tcctacctcc cttgggncac tccccngttg gatgggtntt gggggaggag ncctgntggg 480
gnttttccc at 493

<210> 36
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(354)
<223> 3' terminal sequence. fibroblast growth
factor receptor 4 (FGFR4) g ene.

<400> 36
tttttgtttt ttatttcaaa aaaataattt ataaaacgcc atttgctcct gttttcggca 60
ggcttccagc ttctctgggc tcaggggcaa tgctcccgtc aagacgctgg ggcagcagca 120

gcagggggag gtntggggaa aggggttca gaggcccaga acctcctgct ggtattggga 180
ggcaggaggt ttagcatagc agctctcca g ccaggctcag ccaaacccgg gatggggact 240
aagcgccaag gtccaagaag ccgagcagaa ccctgacatt tggggccatc aggacanagg 300
cacggcagct cccaagggca aggggcacgg ccttngggac angggcacag caac 354

<210> 37
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(336)
<223> 5' terminal sequence. fibroblast growth
factor receptor 4 (FGFR4) gene.

<400> 37
atcggatgga ccgaccccca cactgccccc cagagctgta cgggctgatg cgtgagtgct 60
ggcagcagcg cc ctcccaga ggcctacctt caagcagctg gtggaggcgc tggacaaggt 120
ctgctggccg tctctgagga gtacctcgac ctccgcctga ccttcggacc ctattccccc 180
tctggtgggg aacgccagca gcacctgctt cctccagcga ttctgtcttc agccacgacc 240
ccctgccatt ggggattcag ctccttccct ttgggtctng gggtgcagac atga gcaagg 300
ctnaagggtt ttgcaaggga catagggttg gtgggc 336

<210> 38
<211> 3015
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(3015)
<223> fibroblast growth factor receptor 4 (FGFR4)
gene.

<400> 38
ccgaggagcg ctcgggctgt ctgcggaccc tgccgcgtgc aggggtcgcg gccggctgga 60
gctgggagtg aggcggcgga ggagccaggt gaggaggagc caggaaggca gttggtggga 120
agtccagctt gggtccctga gagctgtgag aaggagatgc ggctgctgct gg ccctgttg 180
ggggtcctgc tgagtgtgcc tgggcctcca gtcttgtccc tggaggcctc tgaggaagtg 240
gagcttgagc cctgcctggc tcccagcctg gagcagcaag agcaggagct gacagtagcc 300
cttgggcagc ctgtgcggct gtgctgtggg cgggctgagc gtggtggcca ctggtacaag 360
gagggcagtc gcctggcacc tgctggccgt gtacggggct ggaggggccg cctagagatt 420
gccagcttcc tacctgagga tgctggccgc tacctctgcc tggcacgagg ctccatgatc 480
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tggacacacc cccagcgcat ggagaagaaa ctgcatgcag tacctgcggg gaacaccgtc 660
aagttccgct gtccagctgc aggcaacccc acgcccacca tccgctggct taaggatgga 720
caggcctttc atggggagaa ccgcattgga ggcattcggc tgcgccatca gcactggagt 780
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gtgcaggcac ataggctggt ggccttgggc cttggggctc agccacagcc tgacacagtg 2640
ctcgaccttg atagcatggg gcccctggcc cagagttgct gtgccgtgtc caagggccgt 2700
gcccttgccc ttggagctgc cgtgcctgtg tcctgatggc ccaaatgtca gggttctgct 2760
cggcttcttg gaccatgg cg cttagtcccc atcccgggtt tggctgagcc tggctggaga 2820
gctgctatgc taaacctcct gcctcccaat accagcagga ggttctgggc ctctgaaccc 2880
cctttcccca cacctccccc tgctgctgct gccccagcgt cttgacggga gcattggccc 2940
ctgagcccag agaagctgga agcctgccga aaacaggagc aaatggcgtt ttataaa tta 3000
ttttttgaa ataaa 3015

<210> 39
<211> 252
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(252)
<223> 3' terminal sequence. ectonucleotide
pyrophosphatase/phosphodiesterase 2 (autotaxin)
(ENPP2) gene.

<400> 39
gtgtgattta ttatgtttaa gattggttta taaggcttaa atatatctgt catagttaac 60
agttaacagc aaataaaggc aactttacaa aatcagtgtt tccatacagt acaggactaa 120
atgtggcaac tgtgcattgg aaaattaata tttcctcaat gcaaatntca aatctgcagc 180
accatttaga agcttccact aaaaactcaa gctgcagtat ttattacang ctctactcng 240
aacacanggc ta 252

<210> 40
<211> 382

<212> DNA
<213> Artificial Sequen ce

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(382)
<223> 5' terminal sequence. ectonucleotide
pyrophosphatase/phosphodiesterase 2 (autotaxin)
(ENPP2) gene.

<400> 40
ctnacnttca aacgganntg gaa ttatttc caaagggtat tggtgaagaa atatgcttcg 60
gaaagaaatg gagttaacgt gataagtgga ccaatcttcg actatgacta tgatggctta 120
catgacacag aagacaaaat aaaacagtac gtggaaggca gttccattcc tgttccaact 180
cactactaca gcatcatcac cagctgtctg gattttactc agcctgccga caagtgtgac 240
ggccctctct ctgtgtcctc cttcatcctg cctcaccggc ctgacaacga ggagagctgc 300
aatagctcag aggacgnatt caaaatgggt agnaggaact catgaaggnt gcacacagct 360
agggtncgtt gacctttgna cc 382

<210> 41
<211> 2592
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2592)
<223> ectonucleotide
pyrophosphatase/phosphodiesterase 2 (autotaxin)
(ENPP2) gene.

<400> 41
atggcaagga ggagctcgtt ccagtcgtgt ca gataatat ccctgttcac ttttgccgtt 60
ggagtcaata tctgcttagg attcactgca catcgaatta agagagcaga aggatgggag 120
gaaggtcctc ctacagtgct atcagactcc ccctggacca acatctccgg atcttgcaag 180
ggcaggtgct ttgaacttca agaggctgga cctcctgatt gtcgctgtga caacttgtgt 240
aagagctata ccagttgctg ccatgacttt gatgagctgt gtttgaagac agcccgtgcg 300
tgggagtgta ctaaggacag atgtggggaa gtcagaaatg aagaaaatgc ctgtcactgc 360
tcagaggact gcttggccag gggagactgc tgtaccaatt accaagtggt ttgcaaagga 420
gagtcgcatt gggttgatga tgactgtgag gaaataaagg ccgcagaatg ccc tgcaggg 480
tttgttcgcc ctccattaat catcttctcc gtggatggct tccgtgcatc atacatgaag 540
aaaggcagca aagtcatgcc taatattgaa aaactaaggt cttgtggcac acactctccc 600
tacatgaggc cggtgtaccc aactaaaacc tttcctaact tatacacttt ggccactggg 660
ctatatccag aatcacatgg aattgttggc a attcaatgt atgatcctgt atttgatgcc 720
acttttcatc tgcgagggcg agagaaattt aatcatagat ggtggggagg tcaaccgcta 780
tggattacag ccaccaagca aggggtgaaa gctggaacat tcttttggtc tgttgtcatc 840
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gatggactga aacaactaaa actgcatcgg tgtgtcaacg tcatctttgt cggagaccat 1080
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gctaaatatg accccaaagc cattattgcc aatctcacgt gtaaaaaacc agatcagcac 1260
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ggttatagtg aaatattcct aatgccactc tggacatcat atactgtttc caaacaggct 1920
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tccattcctg ttccaactca ctactacagc atcatcacca gctgtctgga tttcactcag 2340
cctgccgaca agtgtgacgg ccctctctct gtgtcctcct tcatcctgcc tcaccggcct 2400
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aagatgcaca cagctagggt gcgtgacatt gaacatctca ccagcctgga cttcttccga 2520
aagaccagcc gcagctaccc agaaatcctg acactcaaga catacctgca tacatatgag 2580
agcgagattt aa 2592

<210> 42
<211> 467
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(467)
<223> 3' terminal sequence. v-rel avian
reticuloendotheliosis viral oncogene homolog a
(nuclear factor of kappa light polypeptide gene
enhancer in b-cells 3 (p65)) (RELA) gene.

<400> 42
acagatttat tagttcagag tagaaagagc aagagtccaa gtgctttgat tgttcagtaa 60
aaactatgcc tccngactgg agagctgcca gcctgctctc ccccactctt aacaacttac 120
cctactatta aggcacttga gaagagggag agcaaggaag tcccagacca aacccccttct 180
ggatccnggg ngagagccag tgctgttgcn tggtnttcct tcagccatgg ttgagcaagg 240
aaagagccgg cagagacctc tgtagggcag gaaggccagc ccctcaaacg ctggtnttag 300
ggcacagggg acaatgccag tgccatacag gggctggtat ctgggggcgt tattttgatt 360
aagctgtaat gaatccatga tgggaaggac acttgataag gctttntggg gctcaaaggn 420
ctttacctcc agcctgcttc tntctctagg gngagtaccc agaagct 467

<210> 43
<211> 2444
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature

<222> (1)..(2444)
<223> v-rel avian reticuloendotheliosis viral oncogene homolog a (nuclear factor of kappa light polypeptide gene enhancer in b -cells 3 (p65)) (RELA) gene.

<400> 43
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tcttcccggc agagcagccc aagcagcggg gcatgcgctt ccgctacaag tgcgaggggc 120
gctccgcggg cagcatccca ggcgagagga gcacagatac caccaagacc caccccacca 180
tcaagatcaa tggctacaca ggaccaggga cagtgcgcat ctccctggtc a ccaaggacc 240
ctcctcaccg gcctcacccc cacgagcttg taggaaagga ctgccgggat ggcttctatg 300
aggctgagct ctgcccggac cgctgcatcc acagtttcca gaacctggga atccagtgtg 360
tgaagaagcg ggacctggag caggctatca gtcagcgcat ccagaccaac aacaacccct 420
tccaagttcc tatagaagag cagcgtgggg actacgacct gaatgctgtg cggctctgct 480
tccaggtgac agtgcgggac ccatcaggca ggcccctccg cctgccgcct gtcctttctc 540
atcccatctt tgacaatcgt gcccccaaca ctgccgagct caagatctgc cgagtgaacc 600
gaaactctgg cagctgcctc ggtggggatg agatcttcct actgtgtgac aaggtgcaga 660
aagaggacat tgaggtgtat ttcacgggac caggctggga ggcccgaggc tccttttcgc 720
aagctgatgt gcaccgacaa gtggccattg tgttccggac ccctccctac gcagacccca 780
gcctgcaggc tcctgtgcgt gtctccatgc agctgcggcg gccttccgac cgggagctca 840
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aacgtaaaag gacatatgag accttcaaga gcatcatgaa gaagagtcct ttcagcggac 960
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caggaggcat agtttttagt gaacaatcaa agcacttgga ctcttgctct ttctactctg 2400
aactaataaa gctgttgcca agctggacgg cacgagctcg tgcc 2444

<210> 44
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(381)

<223> 5' terminal sequence. il2 -inducible t-cell
kinase (ITK) gene.

<400> 44
aactctttcc tttggttgtg ctaagaggtg atgcccaagg tgcaccacct ttcaagaact 60
ggatcatgaa caactttatc ctcctggaag aacagctcat caagaaatcc caacaagaga 120
agaacttctc cctcgaactt taaagtccgc ttctttgtgt taaccaaagc cagcctgg ca 180
tactttgaag atcgtcatgg gaagaagcgc acgctgaagg ggtccattga gctctcccga 240
attcaaatgt gttgaggttg tgaaaagtga catcagcatc ccatgccact attaaatacc 300
cgttttcagg tnggtgcatg acaacttacc tcctnttatg gtgtttgntt ccagntcgtg 360
aggaggccgg ncagcgttng g 381

<210> 45
<211> 6381
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(6381)
<223> il2-inducible t-cell kinase (ITK) gene.

<400> 45
cgcggccgct atatataatg cagcatcaca ccatgtaggg catttactct tattttatac 60
attcagatat gtttgaaaca ttcttaaggc tacaaaacag aacatagaaa aataaacagg 120
aatatattca acacttacaa aaagtgatat gataaagaat ataaagtact agtttccttt 180
taacacttca aaagatatgt atatatactt ttttttacaa gtaacatcac aaatgctcac 240
atcttcacat gctcttaaag tattatttgt actcagtgta aggctattat cgtttttcat 300
acataaaatt ttctagctct gtaacacaat gcaatttta atccattcag taagttcaac 360
cccaaagttg ccgcttccca gcattaagac atgcacccac ccctcttcta agattttcta 420
aacttgtatt tcggggagaa agacctct tt taaaaaataa tccaattagt gggagagtaa 480
atggctgaca ttagtagcaa aaccttagtt atctgaaaat aacatattgg aaatgagaca 540
ttattaggat tttaaacaaa caatagcatt tagacataaa gtaggaagca aaatacagta 600
aacagaaata gtgtagccaa atatcattct cttcagctac cttaagtaaa agacaaaaca 660
tttacctcat ctaaaaatga aggtaaaacg aaagaggcaa aaataaatat tgctagtttc 720
taggatggct gaatgtttc taaaccagaa atggttagaa aggaacttta ttgcaccaag 780
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gaacaacacg ctgcgagaat acagtctaca gtctgcatta aataagaa ta tatcagcatt 900
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caggtgagct ttggtcagtc tgttcttcaa aatatgtatg atcatatggt aatgaagttt 1200
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gccaccgatg ttaagaaaaa aatggcttaa gcggtacctt caacaactat tctagttaag 1920
aaggtgacaa caaattgagg ccgcgaattc ggcgaaaact ctttcctttg g ttgtgctaa 1980
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caggcggaga ccccaggcag cgcggtggac taccccctgc atgaccttgt cctccacacc 12060
aactacaccg ccacagtgcg tggcctgcgg ggccccaacc tcacttcccc agccagcatc 12120
accttcacca cagggctaga ggcccctcgg gacttggagg ccaaggaagt gaccccccgc 1218 0
accgccctgc tcacttggac tgagccccca gtccggcccg caggctacct gctcagcttc 12240
cacacccctg gtggacagaa ccaggagatc ctgctcccag gagggatcac atctcaccag 12300
ctccttggcc tctttccctc cacctcctac aatgcacggc tccaggccat gtggggccag 12360
agcctcctgc cgcccgtgtc cacctctttc accac gggtg ggctgcggat ccccttcccc 12420
agggactgcg gggaggagat gcagaacgga gccggtgcct ccaggaccag caccatcttc 12480
ctcaacggca accgcgagcg gcccctgaac gtgttttgcg acatggagac tgatgggggc 12540
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gactatgccc atggttttgg gaacatctct ggagagttct ggctgggcaa tgaggccctg 12660
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ggggcctggt ggtacaggaa ctgccactac gccaacctca acgggctcta cgggagcaca 12960
gtggaccatc agggagtgag ctggtaccac tggaagggct tcgagttctc ggtgcccttc 13020
acggaaatga agctgagacc aagaaacttt cgctccccag cgggggagg ctgagctgct 13080
gcccacctct ctcgcacccc agtatgactg ccgagcactg aggggtcgcc ccgagagaag 13140
agccagggtc cttcaccacc cagccgctgg aggaagcctt ctctgccagc gatctcgcag 13200
cactgtgttt acaggggga ggggagggt tcgtacagga gcaataaagg agaaactgag 13260
gtacccgg 13268

<210> 48
<211> 438
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(438)
<223> 3' terminal sequence. colony stimulating
factor 1 (macrophage) (CSF1) gene.

<400> 48
ttttgcagct tgtgcacttc ttttattatt aaatatataa gcagcttcct atcttttaaa 60
tagatattta aatgacttta tataaaataa ttcaccactt ccaagtataa aaacaaaatc 120
tcacagtgcg tgancaatgt cctctc ttga cttctcagag aacagaaggg gttcctgagc 180
aggtagcctg gggggacacc agaggngcct ctggggctcc tcctgctctg atgccaccaa 240
gtgctcaaaa agagcttctg cagtggggtt gggattgctt ttttgacctt taaaatatta 300
tatgtttaag gtaggggggg atgaaggggg gaatgccctt tttatttttc ttcccatttt 360
aaaaatatgt gttttctagg catccaaata tagggggctg tggcctggga gggctaggcc 420
ccctttgcca ggttcact 438

<210> 49
<211> 390
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(390)
<223> 5' terminal sequence. colony stimulating
factor 1 (macrophage) (CSF1) gene.

<400> 49
ggcacgaggc gagctctgac tgaagatggg cctttgaaat ataggtatgc acctgaggtt 60
gggggagggt ctgcactccc aaaccccagc gcagtgtcct ttccctgc tg ccgacagaac 120
ctggggctga gcaggttatc cctgtcagga gccctgggac tgggctgcat ctcagcccca 180
cctggcatgg tatccagctc ccatccactt cttcaccctt ctttcctcct gaccttgggt 240
caacagtgat ggaccttcca actcttcacc caccccctct accattcacc tctaaaccag 300
gggaagccag gggtngggag agcant cagg gagagccagg gcttcagttt tccaattgct 360
ggggangggc ttccattttn tggggccagc 390

<210> 50
<211> 2475
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2475)
<223> colony stimulating factor 1 (macrophage)
(CSF1) gene.

<400> 50
agccgctctc cgcatcccag gacagcggtg cggccctcgg ccggggcgcc cactccgcag 60
cacccagcga gcgagcgagc gagcgagggc ggccgacgcg cccggccggg acccagctgc 120
ccgtatgacc gcgccgggcg ccgccgggcg ctgccctccc acgacatggc tgggctccct 180
gctgttgttg gtctgtctcc tggcgagcag gagtatcacc gaggaggtgt cggagtactg 240
tagccacatg attgggagtg gacacctgca gtctctgcag cggctgattg acagtcagat 300
ggagacctcg tgccaaatta catttgagtt tgtagaccag gaacagttga aagatccagt 36 0
gtgctacctt aagaaggcat ttctcctggt acaagacata atggaggaca ccatgcgctt 420
cagagataac acccccaatg ccatcgccat tgtgcagctg caggaactct ctttgaggct 480
gaagagctgc ttcaccaagg attatgaaga gcatgacaag gcctgcgtcc gaactttcta 540
tgagacacct ctccagttgc tggagaaggt caagaatgtc tttaatgaaa caaagaatct 600
ccttgacaag gactggaata ttttcagcaa gaactgcaac aacagctttg ctgaatgctc 660
cagccaagat gtggtgacca agcctgattg caactgcctg taccccaaag ccatccctag 720
cagtgacccg gcctctgtct cccctcatca gcccctcgcc ccctccatgg cccctgtggc 780
tggcttgacc tgggaggact ctgagggaac tgagggcagc tcctcttgc ctggtgagca 840
gcccctgcac acagtggatc caggcagtgc caagcagcgg ccacccagga gcacctgcca 900
gagctttgag ccgccagaga ccccagttgt caaggacagc accatcggtg gctcaccaca 960
gcctcgcccc tctgtcgggg ccttcaaccc cgggatggag gatattcttg actctgcaat 1020
gggcactaat tgggtcccag aagaagcctc tggagaggcc agtgagattc ccgtacccca 1080
agggacagag ctttcccctt ccaggccagg agggggcagc atgcagacag agcccgccag 1140
acccagcaac ttcctctcag catcttctcc actccctgca tcagcaaagg gccaacagcc 1200
ggcagatgta actggtaccg ccttgcccag ggtgg gcccc gtgaggccca ctggccagga 1260
ctggaatcac acccccaga agacagacca tccatctgcc ctgctcagag acccccggga 1320
gccaggctct cccaggatct catcaccgcg cccccagggc ctcagcaacc cctccaccct 1380
ctctgctcag ccacagcttt ccagaagcca ctcctcgggc agcgtgctgc cccttgggga 1440
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gaggcggcgg agccatcaag agcctcagag agcggattct cccttggagc aaccagaggg 1740
cagccccctc actcaggatg acagacaggt ggaactgcca gtgtagaggg aattctaaga 1800
cccctcacca tcctggacac tctcgtttgt caatgtccct ctgaaaatgt gacgcccagc 1860
cccggacaca gtactccaga tgt tgtctga ccagctcaga gagagtacag tgggactgtt 1920
accttccttg atatggacag tattcttcta tttgtgcaga ttaagattgc attagttttt 1980
ttcttaacaa ctgcatcata ctgttgtcat atgttgagcc tgtggtctat aaaaccccta 2040
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taacttttt aaccaaagtg cagtttatgt tcacctttgt taaagccacc ttgtggtttc 2160
tgcccatcac ctgaacctac tgaagttgtg tgaaatccta attctgtcat ctccgtagcc 2220
ctcccagttg tgcctcctgc acattgatga gtgcctgctg ttgtctttgc ccatgttgtt 2280
gatgtagctg tgaccctatt gttcctcacc cctgccc ccc gccaacccca gctggcccac 2340
ctcttccccc tcccacccaa gcccacagcc agcccatcag gaagccttcc tggcttctcc 2400
acaaccttct gactgtcttt tcagtcatgc cccctgctct tttgtatttg gctaatagta 2460
tatcaatttg cactt 2475

<210> 51
<211> 397
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(397)
<223> 3' terminal sequence. villin 2 (ezrin)
(VIL2) gene.

<400> 51
atcngttgaa tagttgattc catacatttc cagg tcctga gcaatcttca ggtattccaa 60
catagcatta tctttgagca tcccacggtg ttccgcatgc cacacctgga tccggtcctc 120
ccactggtcc ctggtaagtt tgtgctggtc catcactctt tgagggatca nccgctcaga 180
gctgaggtac ccagacttgt gcacttcttt gttgtagtcc ccaaacttgg cctgcacagc 240
gtagggaccc caagagcacg gcagtctcag gggggcagt agatctcatc gctaagggat 300
tcctttcctt cacttnggag ggaggaaaag tttctggggt gatgtcctgg ggatgagctt 360
ccttcagcca catctttcag gggnaggact ttnggcc 397

<210> 52
<211> 468
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(468)
<223> 5' terminal sequence. villin 2 (ezrin)
(VIL2) gene.

<400> 52
ggacgaggca gggcgggcgg gcgctctaag ggttctgctc tgactccagg ttgggacagc 60
gtcttcgctg ctgct ggata gtcgtgtttt cggggatcga ggatactcac cagaaaccga 120
aaatgccgaa accaatcaat gtccgagtta ccaccatgga tgcagagctg gagtttgcaa 180
tccagccaaa tacaactgga aaacagcttt ttgatcaggt ggtaaagact atcggcctcc 240
gggaagtgtg gtactttggc ctccactatg tggatnaata aaggatttcc tacctgg gct 300
gaagctggat aagaaggtgt ctgcccagga ggtcaggaag gagaatcccc tccagttcaa 360

gttccggggc caagttctac cctgaagatg tgggctgagg agctcattcc agggacattc 420
acccagaaat tttntttcnt ccaagtgaag gaagggattc ttaggcgn 468

<210> 53
<211> 3064
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(3064)
<223> villin 2 (ezrin) (VIL2) gene.

<400> 53
aggcagggcg ggcgggcgct ctaagggttc tgctctgact ccaggttggg acagcgtctt 60
cgctgctgct ggatag tcgt gttttcgggg atcgaggata ctcaccagaa accgaaaatg 120
ccgaaaccaa tcaatgtccg agttaccacc atggatgcag agctggagtt tgcaatccag 180
ccaaatacaa ctggaaaaca gctttttgat caggtggtaa agactatcgg cctccgggaa 240
gtgtggtact ttggcctcca ctatgtggat aataaaggat ttcctacctg gctgaagc tg 300
gataagaagg tgtctgccca ggaggtcagg aaggagaatc ccctccagtt caagttccgg 360
gccaagttct accctgaaga tgtggctgag gagctcatcc aggacatcac ccagaaactt 420
ttcttcctcc aagtgaagga aggaatcctt agcgatgaga tctactgccc ccctgagact 480
gccgtgctct tgggtccta cgctgtgcag gccaag tttg gggactacaa caaagaagtg 540
cacaagtctg ggtacctcag ctctgagcgg ctgatccctc aaagagtgat ggaccagcac 600
aaacttacca gggaccagtg ggaggaccgg atccaggtgt ggcatgcgga acaccgtggg 660
atgctcaaag ataatgctat gttggaatac ctgaagattg ctcaggacct ggaaatgtat 720
ggaatcaact attt cgagat aaaaaacaag aaaggaacag acctttggct tggagttgat 780
gcccttggac tgaatattta tgagaaagat gataagttaa ccccaaagat tggctttcct 840
tggagtgaaa tcaggaacat ctctttcaat gacaaaaagt ttgtcattaa acccatcgac 900
aagaaggcac ctgactttgt gttttatgcc ccacgtctga gaatcaacaa gcggat cctg 960
cagctctgca tgggcaacca tgagttgtat atgcgccgca ggaagcctga caccatcgag 1020
gtgcagcaga tgaaggccca ggcccgggag gagaagcatc agaagcagct ggagcggcaa 1080
cagctggaaa cagagaagaa aaggagagaa accgtggaga gagagaaaga gcagatgatg 1140
cgcgagaagg aggagttgat gctgcggctg c aggactatg aggagaagac aaagaaggca 1200
gagagagagc tctcggagca gattcagagg gccctgcagc tggaggagga gaggaagcgg 1260
gcacaggagg aggccgagcg cctagaggct gaccgtatgg ctgcactgcg ggctaaggag 1320
gagctggaga gacaggcggt ggatcagata aagagccagg agcagctggc tgcggagctt 1380
gcagaatata cagccaagat tgccctcctg gaagaggcgc ggaggcgcaa ggaggatgaa 1440
gttgaagagt ggcagcacag ggccaaagaa gcccaggatg acctggtgaa gaccaaggag 1500
gagctgcacc tggtgatgac agcacccccg cccccaccac cccccgtgta cgagccggtg 1560
agctaccatg tccaggagag cttgcaggat gagggcgcag agccc acggg ctacagcgcg 1620
gagctgtcta gtgagggcat ccgggatgac cgcaatgagg agaagcgcat cactgaggca 1680
gagaagaacg agcgtgtgca gcggcagctc gtgacgctga gcagcgagct gtcccaggcc 1740
cgagatgaga ataagaggac ccacaatgac atcatccaca acgagaacat gaggcaaggc 1800
cgggacaagt acaagacgct gcggcagatc cggcagggca acaccaagca gcgcatcgac 1860
gagttcgagg ccctgtaaca gccaggccag gaccaagggc agaggggtgc tcatagcggg 1920
cgctgccagc cccgccacgc ttgtctttag tgctccaagt ctaggaactc cctcagatcc 1980
cagttccttt agaaagcagt tacccaacag aaacattctg ggctgggaac cagggaggc g 2040
ccctggtttg ttttccccag ttgtaatagt gccaagcagg cctgattctc gcgattattc 2100
tcgaatcacc tcctgtgttg tgctgggagc aggactgatt gaattacgga aaatgcctgt 2160
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gaaacgtggc aggacttcca tctgtgccat act tgttctg tattcgaaat gagctcaaat 2280
tgatttttt aatttctatg aaggatccat ctttgtatat ttacatgctt agaggggtga 2340
aaattatttt ggaaattgag tctgaagcac tctcgcacac acagtgattc cctcctcccg 2400
tcactccacg cagctggcag agagcacagt gatcaccagc gtgagtggtg gaggaggaca 2460
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aacattagtt ttaaaaaggg aaagttttgt tctgtatatt ttgttacctt ttacagaata 2640
aaagaattac atatgaaaaa ccctctaaac catggcactt gatgtga tgt ggcaggaggg 2700
nagtggtgga gctggacctg cctgctgcag ctgcagtcac gtgtaaacag gattattatt 2760
agtgttttat gcatgtaatg gactatgcac acttttaatt ttgtcagatt cacacatgcc 2820
actatgagct ttcagactcc agctgtgaag agactctgtc tgcttgtgtt tgtttgcagt 2880
ctctctctgc catggccttg g caggctgct ggaaggcagc ttgtggaggc cgttggttcc 2940
gcccactcat tccttctcgt gcactgcttt ctccttcaca gctaagatgc catgtgcagg 3000
tggattccat gccgcagaca tgaaataaaa gctttgcaaa ggcaaagaaa aaaaaaaaaa 3060
aaaa 3064

<210> 54
<211> 435
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(435)
<223> 3' terminal sequence. adenomatosis polyposis
coli (APC) gene.

<400> 54
tgcataaata ccaatttttc cctgatgtaa gtttagtcag tttataatct agaaatgatt 60
gataacagca atatatcata ttttctatct gtagtgttca ttattttaag acaagcaata 120
attaaaggaa gttgggatgg gatgctactt taaatacatg taaaacatac tgtacaaaca 180
tacttggctt tactattttt ttcctaacca tcaagagtgc ctcccaaaat aa gnccagtg 240
aagacaaagt atactatcaa atatgggctt ccnggaacaa aaaccctctt aacaagggnt 300
ccaaacccta tttaccaaaa ttttcccggt cttttaaggt ttccatttgg aaaccaaaat 360
gtctatatgg ccggttggta attancatgg ggnttttctt gggnttcctt cttcccncct 420
ctttttaacc ggtgg 435

<210> 55
<211> 414
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(414)
<223> 5' terminal sequence. adenomatosis polyposis
coli (APC) gene.

<400> 55
agaaaatgaa ttttctccca caaatagtac ttctcagacc gtttcctcag gtgctacaaa 60
tggtgctgaa tcaaagactc taatttatca aatggcacct gctgtttcta aaacagagga 120
tgtttgggtg agaattgagg actgtcccat taacaatcct agatctggaa gatctcccac 180
aggtaatact cccccggtga ttg acagtgt ttcagaaaag gcaaatccaa acattaaaga 240
ttcaaaagat aatcagggca aaacaaaatg tggggtaatn ggcagtgttc ccatgncgta 300
ccgtggggtt tnggaaaatc gcctggaact cctttatttc aggtgggatg cccctgacca 360
aaaaggganc tttnggttna aaccggggnc aaattattcc tgttccctgt tttc 414

<210> 56

<211> 10383
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(10383)
<223> adenomatosis polyposis coli (APC) gene.

<400> 56
attgaggact cggaaatgag gtccaagggt agcc aaggat ggctgcagct tcatatgatc 60
agttgttaaa gcaagttgag gcactgaaga tggagaactc aaatcttcga caagagctag 120
aagataattc caatcatctt acaaaactgg aaactgaggc atctaatatg aaggaagtac 180
ttaaacaact acaaggaagt attgaagatg aagctatggc ttcttctgga cagattgatt 240
tattagagcg tcttaaagag cttaacttag atagcagtaa tttccctgga gtaaaactgc 300
ggtcaaaaat gtccctccgt tcttatggaa gccgggaagg atctgtatca agccgttctg 360
gagagtgcag tcctgttcct atgggttcat ttccaagaag agggtttgta aatggaagca 420
gagaaagtac tggatattta gaagaacttg agaaagagag gtcattgctt cttgc tgatc 480
ttgacaaaga agaaaaggaa aaagactggt attacgctca acttcagaat ctcactaaaa 540
gaatagatag tcttccttta actgaaaatt tttccttaca aacagatatg accagaaggc 600
aattggaata tgaagcaagg caaatcagag ttgcgatgga agaacaacta ggtacctgcc 660
aggatatgga aaaacgagca cagcgaagaa tag ccagaat tcagcaaatc gaaaaggaca 720
tacttcgtat acgacagctt ttacagtccc aagcaacaga agcagagagg tcatctcaga 780
acaagcatga aaccggctca catgatgctg agcggcagaa tgaaggtcaa ggagtgggag 840
aaatcaacat ggcaacttct ggtaatggtc agggttcaac tacacgaatg gaccatgaaa 900
cagccagtgt tttgagttct agtagcacac actctgcacc tcgaaggctg acaagtcatc 960
tgggaaccaa ggtggaaatg gtgtattcat tgttgtcaat gcttggtact catgataagg 1020
atgatatgtc gcgaactttg ctagctatgt ctagctccca agacagctgt atatccatgc 1080
gacagtctgg atgtcttcct ctcctcatcc agcttttaca tggcaatgac a aagactctg 1140
tattgttggg aaattcccgg ggcagtaaag aggctcgggc cagggccagt gcagcactcc 1200
acaacatcat tcactcacag cctgatgaca agagaggcag gcgtgaaatc cgagtccttc 1260
atcttttgga acagatacgc gcttactgtg aaacctgttg ggagtggcag gaagctcatg 1320
aaccaggcat ggaccaggac aaaaat ccaa tgccagctcc tgttgaacat cagatctgtc 1380
ctgctgtgtg tgttctaatg aaactttcat ttgatgaaga gcatagacat gcaatgaatg 1440
aactaggggg actacaggcc attgcagaat tattgcaagt ggactgtgaa atgtacgggc 1500
ttactaatga ccactacagt attacactaa gacgatatgc tggaatggct ttgacaaact 1560
tgacttttgg agatgtagcc aacaaggcta cgctatgctc tatgaaaggc tgcatgagag 1620
cacttgtggc ccaactaaaa tctgaaagtg aagacttaca gcaggttatt gcaagtgttt 1680
tgaggaattt gtcttggcga gcagatgtaa atagtaaaaa gacgttgcga gaagttggaa 1740
gtgtgaaagc attgatggaa tgtgctttag aagttaaaaa ggaatcaacc ctcaaaagcg 1800
tattgagtgc cttatggaat ttgtcagcac attgcactga gaataaagct gatatatgtg 1860
ctgtagatgg tgcacttgca tttttggttg gcactcttac ttaccggagc cagacaaaca 1920
ctttagccat tattgaaagt ggaggtggga tattacggaa tgtgtccagc ttgatagcta 1980
caaatgagga ccac aggcaa atcctaagag agaacaactg tctacaaact ttattacaac 2040
acttaaaatc tcatagtttg acaatagtca gtaatgcatg tggaactttg tggaatctct 2100
cagcaagaaa tcctaaagac caggaagcat tatgggacat gggggcagtt agcatgctca 2160
agaacctcat tcattcaaag cacaaaatga ttgctatggg aagtgctgca gct ttaagga 2220
atctcatggc aaataggcct gcgaagtaca aggatgccaa tattatgtct cctggctcaa 2280
gcttgccatc tcttcatgtt aggaaacaaa aagccctaga agcagaatta gatgctcagc 2340
acttatcaga aacttttgac aatatagaca atttaagtcc caaggcatct catcgtagta 2400
agcagagaca caagcaaagt ctctatgg tg attatgtttt tgacaccaat cgacatgatg 2460
ataataggtc agacaatttt aatactggca acatgactgt cctttcacca tatttgaata 2520
ctacagtgtt acccagctcc tcttcatcaa gaggaagctt agatagttct cgttctgaaa 2580
aagatagaag tttggagaga gaacgcggaa ttggtctagg caactaccat ccagcaacag 2640
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ccaaagtcat ggaagaagtg tcagccattc atacctctca ggaagacaga agttctgggt 2760
ctaccactga attacattgt gtgacagatg agagaaatgc acttagaaga agctctgctg 2820
cccatacaca ttcaaacact tacaatttca ctaagtcgga a aattcaaat aggacatgtt 2880

ctatgcctta tgccaaatta gaatacaaga gatcttcaaa tgatagttta aatagtgtca 2940
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aagatgatga aagtaagttt tgcagttatg gtcaataccc agccgaccta gcccataaaa 3060
tacatagtgc aaatcatatg gatgataatg atggagaact agatacacca ataaattata 3120
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gatgggcaag acccaaacac ataatagaag atgaaataaa acaaagtgag caaagacaat 3240
caaggaatca aagtacaact tatcctgttt atactgagag cactgatgat aaaca cctca 3300
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gaattgtgtc tcaacagaaa ctaaatgaac atttcagaat aaattattgc tgtatgtaaa 9420
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atttgtggta ggtacagttc tggggtacat gttaagtgtc cccttataca gtggagggaa 10140
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gttgaataaa tgaaaattta tttttagtga taagattcat acactctgta tttggggaga 10320
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cat 10383

<210> 57
<211> 404
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(404)
<223> 5' terminal sequence. mucin 1, transmembrane
(MUC1) gene.

<400> 57
aaacggaagc agcctctcga tataacctga cgatctcaga cgtcagcgtg agtgatgtgc 60
catttcttt ctctgcccag tctggggctg gggtgccagg ctggggcatc gcgctgctgg 120
tgctggtctg tgttctggtt gcgctggcca ttgtctatct cattgccttg gctgtctgtc 180
agtgccgccg aaagaactac gggcagctgg acatctttcc ag cccgggat acctaccatc 240
ctatgagcga gtaccccacc taccacaccc atggggcgct atgtgccccc taggcagtac 300
cgatcgtagc ccctatgaga aggtttttng caggtaatng gttggcagca gctttttta 360
caaaaaaccc aggcagtngg cagccatttt tgtccaattt ttag 404

<210> 58
<211> 1721
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1721)
<223> mucin 1, transmembrane (MUC1) gene.

<400> 58
gaattccctg gctgcttgaa tctgttctgc cccctcccca cccatttcac caccaccat g 60
acaccgggca cccagtctcc tttcttcctg ctgctgctcc tcacagtgct tacagttgtt 120
acaggttctg gtcatgcaag ctctacccca ggtggagaaa aggagacttc ggctacccag 180
agaagttcag tgcccagctc tactgagaag aatgctgtga gtatgaccag cagcgtactc 240
tccagccaca gccccggttc aggctcctcc accactca gg gacaggatgt cactctggcc 300
ccggccacgg aaccagcttc aggttcagct gccacctggg gacaggatgt cacctcggtc 360
ccagtcacca ggccagccct gggctccacc accccgccag cccacgatgt cacctcagcc 420
ccggacaaca agccagcccc gggctccacc gccccccag cccacggtgt cacctcggcc 480
ccggacacca ggccgc cccc gggctccacc gccccccag cccacggtgt cacctcggcc 540
ccggacacca ggccgccccc gggctccacc gcgcccgcag cccacggtgt cacctcggcc 600
ccggacacca ggccggcccc gggctccacc gccccccag cccatggtgt cacctcggcc 660
ccggacaaca ggcccgcctt ggcgtccacc gcccctccag tccacaatgt cacctcgg cc 720
tcaggctctg catcaggctc agcttctact ctggtgcaca acggcacctc tgccagggct 780
accacaaccc cagccagcaa gagcactcca ttctcaattc ccagccacca ctctgatact 840
cctaccaccc ttgccagcca tagcaccaag actgatgcca gtagcactca ccatagcacg 900
gtacctcctc tcacctcctc caatcacagc acttct cccc agttgtctac tggggtctct 960
ttctttttcc tgtcttttca catttcaaac ctccagttta attcctctct ggaagatccc 1020

agcaccgact actaccaaga gctgcagaga gacatttctg aaatgttttt gcagatttat 1080
aaacaagggg gttttctggg cctctccaat attaagttca ggccaggatc tgtggtggta 1140
caattgactc tggccttccg agaaggtacc atcaatgtcc acgacgtgga gacacagttc 1200
aatcagtata aaacggaagc agcctctcga tataacctga cgatctcaga cgtcagcgtg 1260
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gctgtctgtc agtgccgccg aaagaactac gggcagctgg acatctttcc agcccgggat 1440
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agcagtaccg atcgtagccc ctatgagaag gtttctgcag gtaatggtgg cagcagcctc 1560
tcttacacaa acccagcagt ggcag ccact tctgccaact tgtaggggca cgtcgccctc 1620
tgagctgagt ggccagccag tgccattcca ctccactcag ggctctctgg gccagtcctc 1680
ctgggagccc ccaccacaac acttcccagg catggaattc c 1721

<210> 59
<211> 359
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(359)
<223> 3' terminal sequence. insulin -like growth
factor 2 (somatomedin a) (IGF2) gene.

<400> 59
ttagccaatt gatttttttg gtggttgttt tttttaaagc caatttctga gcttttgtgg 6 0
ggtgtttcta aaaagccaat tagttttaag agggttgttg tgggggggag ggaaggggtt 120
tagtttaatg ttttgatttt ttatgtgtgg ggataattgg ggataatttg gggggagggt 180
atgtgaaggg tgtttaaagc caatcgattt tgtacatgtt tgaagatgct gctgtgcttc 240
ctcagcccga tggaggggcc cgaggagagt agcctgtttc ggggaggcng ggcacgggga 300
ctgggtcang agaagcccca gggggaccgt ngaccccaga gattttcggg atggaaccc 359

<210> 60
<211> 410
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(410)
<223> 5' terminal sequence. insulin -like growth
factor 2 (somatomedin a) (IGF2) gene.

<400> 60
gtcgacccct ccgaccgtgc ttccggacaa cttccccaga taccccgtgg gcaagttctt 60
ccaatatgac acctgggaag cagtccaccc agcgcctgca ggggcnctgc ctgccctcct 120
gcgtgcccgc cggggtc acg tgctcgccaa ggagctcgag gcgttcaggg aggccaaacg 180
tcaccgtccc ctgattgctc tacccaccca agaccccgcc cacggggcgc ncccccaga 240
gatgggccag caatcggaag tgagcaaaat tgccgcaagt ntttcagccc ggcgncacca 300
ttccttgcag cttnntnntt gaaccacgga gttttnnttn aggtttccat tccngaaaa t 360
tttttnggtt ttncaagttn cccttggggg gttttttttn tttgaaacca 410

<210> 61
<211> 1356
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1356)
<223> insulin-like growth factor 2 (somatomedin a)
(IGF2) gene.

<400> 61
ttctcccgca accttccctt cgctccctcc cgtccccccc agctcctagc ctccgactcc 60
ctccccccct cacgcccgcc ctctcgcctt cgccgaacca aagtggatta attacacgct 120
ttctgtttct ctccgtgctg ttctctcccg ctgtgcgcct gcccgcctct cgctgtcctc 180
tctccccctc gccctctctt cggcccccce ctttcacgtt cactctgtct ctcccactat 240
ctctgccccc ctctatcctt gatacaacag ctgacctcat ttcccgatac cttttccccc 300
ccgaaaagta caacatctgg cccgccccag cccgaagaca gcccgtcctc cctggacaat 360
cagacgaatt ctcccccccc ccccaaaa aa aaaagccatc cccccgctct gccccgtcgc 420
acattcggcc cccgcgactc ggccagagcg gcgctggcag aggagtgtcc ggcaggaggg 480
ccaacgcccg ctgttcggtt tgcgacacgc agcagggagg tgggcggcag cgtcgccggc 540
ttccagacac caatgggaat cccaatgggg aagtcgatgc tggtgcttct caccttcttg 600
gccttcgcct cgtgctgcat tgctgcttac cgccccagtg agaccctgtg cggcgggcag 660
ctggtggaca ccctccagtt cgtctgtggg gaccgcggct tctacttcag caggcccgca 720
agccgtgtga gccgtcgcag ccgtggcatc gttgaggagt gctgtttccg cagctgtgac 780
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cctccgaccg tgcttccgga caacttcccc agataccccg tgggcaagtt cttccaatat 900
gacacctgga agcagtccac ccagcgcctg cgcaggggcc tgcctgccct cctgcgtgcc 960
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cccctgattg ctctacccac ccaag acccc gcccacgggg gcgccccccc agagatggcc 1080
agcaatcgga agtgagcaaa actgccgcaa gtctgcagcc cggcgccacc atcctgcagc 1140
ctcctcctga ccacggacgt ttccatcagg ttccatcccg aaaatctctc ggttccacgt 1200
ccccctgggg cttctcctga cccagtcccc gtgccccgcc tccccgaaac aggctactct 1260
cctcggcccc ctccatcggg ctgaggaagc acagcagcat cttcaaacat gtacaaaatc 1320
gattggcttt aaacaccctt cacataccct cccccc 1356

<210> 62
<211> 474
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(474)
<223> 3' terminal sequence. egf-like module
containing, mucin-like, hormone receptor-like
sequence 1 (EMR1) gene.

<400> 62
tttaggagna aatcagtcag acaggcgaca aatcatttat tgagaggttc tctgtgtcag 60
gcgtatgata ggcgctggag gggcacgctt agaaccatgc accaacaagg gcaggagaaa 120
acaaaatggt agccaggtgt tcttggtcat gccattgaat ttgggtctgt tctcagaaac 180
tctggaattg aagaagttgc aganaccgaa gataaaatgg tcgtttggag cagaaacacc 240
tgatttctca tcagtgcata caaccacagg aagacggccc ccaacatt ct tccccagagg 300

gttctggggc tgggtgggga tccctcattt cccatgttaa gcttgaggaa gagatttcag 360
ggtaggctcc ctgcagggaa actacttgtc cctcaacttt nggcctccca tagcatattt 420
tnaaagccag naagggcttt ttaacccctt ntttgggaag cccgattggc att 474

<210> 63
<211> 457
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(457)
<223> 5' terminal sequence. egf-like module containing, mucin-like, hormone receptor-like sequence 1 (EMR1) gene.

<400> 63
tctgctcaac ggccaggtac gagaagaata caagaggtgg atcactggga agacgaagcc 60
cagctcccag tcccagacct caaggatctt gctgtcctcc atgccatccg cttccaagac 120
gggttaaagt cctttcttgc tttcaaatat gctatggagc cacagttgag gacagtagtt 180
tcctgcagga gcctaccctg aaatctcttc tcag cttaac atgggaaatg aggatcccac 240
cagccccagg aaccctctgg gggaaggaat gttggggggc cgtcttcctg tgggttgtat 300
tgcantgatg gaggaaatca ggtgtttttt gntccaaacg gaccatttta ntctttcgtg 360
gntttgcaan ttttttcaan ttccagagtt ttttgaggna caggacccaa nttcantggg 420
catgnaccag gaacatcggg gttaaccntt tttgttt 457

<210> 64
<211> 3149
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(3149)
<223> egf-like module containing, mucin-like, hormone receptor-like sequence 1 (EMR1) gene.

<400> 64
ctaaagtttt tttctttgaa tgacagaact acagcataat gcgtggcttc aacctgctcc 60
tcttctgggg atgttgtgtt atgcacagct gggaagggca cataagaccc acacggaaac 120
caaacacaaa gggtaataac tgtagagaca gtaccttgtg c ccagcttat gccacctgca 180
ccaatacggt ggacagttac tattgcactt gcaaacaagg cttcctgtcc agcaatgggc 240
aaaatcactt caaggatcca ggagtgcgat gcaaagatat tgatgaatgt tctcaaagcc 300
cccagccctg tggtcctaac tcatcctgca aaaacctgtc agggaggtac aagtgcagct 360
gtttagatgg tttctcttct cccactggaa atgactgggt cccaggaaag ccgggcaatt 420
tctcctgtac tgatatcaat gagtgcctca ccagcagggt ctgccctgag cattctgact 480
gtgtcaactc catgggaagc tacagttgca gctgtcaagt tggattcatc tctagaaact 540
ccacctgtga agacgtgaat gaatgtgcag atccaagagc ttgcccagag catgcaactt 6 00
gtaataacac tgttggaaac tactcttgtt tctgcaaccc aggatttgaa tccagcagtg 660
gccacttgag ttgccagggt ctcaaagcat cgtgtgaaga tattgatgaa tgcactgaaa 720
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gttttctcct gcccttgttg gtgcatggtt ctaagcgtgc ccctccagcg cctatcatac 3060
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaa 3149

<210> 65
<211> 412
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(412)
<223> 3' terminal sequence. kiaa0427 gene product
(KIAA0427) gene.

<400> 65
ttaatatcga ctcggccaac atttacattt acatg gatgg acaggacgat ccccaaacag 60
tgaaggttta cagactggtc aaggaaggac gaacagagag aatggggtct gagggtgcac 120
atcccgtgga gggtggcggg gctcctggcc tcgtctgggt gaggttggga gcctcgctgg 180
ggctgcggtc ccagagcttc ggcaaagcca ccaggccttg gggagcaggg ctttggcaag 240
caggccgcct cgga gaaaaa caatgactaa ctcatcctga cagggcagtt ggggagactt 300
taggacaggn ttcaacattc agatgggctt ggaccncctt tttccattnc ggccaaggaa 360

ccccgggcn aggggngaaa gcaattncaa agcctttagg aaatttcaat tt 412

<210> 66
<211> 442
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(442)
<223> 5' terminal sequence. kiaa0427 gene product
(KIAA0427) gene.

<400> 66
atctgaacaa caacacttta agctgttttt ctaaatgcag gttgctgctc ctttttcaga 60
tatggaagga aaacgttaag actatttttt ttttaaagaa acaacagtca agcctaaaat 120
ttgagacccc gaggcagctt cccgagggag actgctcaga caggaactgc aggacagaag 180
tggatgcccc acagaccctg ggccccctcc ccaagtccat cccctctctg tgggcatgag 240
gaaggccgcg tccgagttga cctctgaatg tatgtgatga gaggcagagc tgggatattg 300
catttcttaa gggttgcatt gcttttcccc ttcgcccgcg ttctttggcg catggaagga 360
ggcggttcca gccatcttga tgtttgatcc ngttttcagt nttccccant tgcctnttca 420
gggatngagt tagttcattt tt 442

<210> 67
<211> 5737
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(5737)
<223> kiaa0427 gene product (KIAA0427) gene.

<400> 67
gtcagatcag ggatcatttt ttttccttcc tctactccct ccccctacc cgcccctccc 60
tccctgtttc ccttccctcc ctccctcccc tctctgctgg gtctgtgcgc tggggcgccc 120
gatcccctcc gcagctggga cgctccgaac tcgaggcagg agtcggctct ccggagcctc 180
gtccctccct tcccctccc tgccccctc ccccacccc gactcgggct tggcgcggcg 240
gccagaggaa ccccgagtcc cggcccaggc ccctgagctg ga gggatgga aaactcctct 300
gcagcatcag cctcctcgga ggcagggagc agccgctccc aggagatcga ggagctggag 360
cgcttcatcg acagctacgt gctggagtac caggtgcagg ggctgctggc tgacaagacg 420
gagggtgatg gcgagagcga gaggacccag tcccacatct cccagtggac agcggactgc 480
agcgaaccgc tggacagcag ctgttccttc tcccgagggc gagccccccc acagcagaat 540
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caccgcaaag tccgacacac gcccaagcag cccctgccac acatcgaccg cgaagggtgt 72 0
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gcaggggaca ccgggc acag cagcctcgag gccccccgca gccctgacac cctggccccg 1200
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ggacctacct ccccagagca agggcctggg gcttcccgcc aaagctgccg cggaaccccg 5640
ctagtgcgac caccctccct ccgtcggtat gtcctgcttt ccagctgaac ccaaactaca 57 00
agtgggttta aaaaaaataa acaccaccac caaaaac 5737

<210> 68
<211> 377
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(377)
<223> 3' terminal sequence. spleen tyrosine kinase
(SYK) gene.

<400> 68
tctttctttc tttccttaac tggctacatg cttagaaact gcactggtca aacttgattt 60
tctttttaaa gcctcaaaac atttttattg tcaggaaagc ttttcagtgg ccagggatca 120
gtctcatggc cgtagaagca gccaaattcc tctgcctttg ccttcccttc aggagtca ca 180
tgctaaggca tccttggggc atttgggaaa agngccgctt gggggtgaga gtgctctagg 240
gccactctgc aatgtccctg gggnccgatg aggtaacaaa tgcaccccgg ggacccagag 300
gagtggggaa agacatgaag gggatttggg aacagatccg taaaaaataa cctgttntgg 360
aaattcacca caggcca 377

<210> 69
<211> 323
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(323)
<223> 5' terminal sequence. spleen tyrosine kinase
(SYK) gene.

<400> 69
ttaattttgg aggccgtcca caacttccag gttcccatcc tgcgacttgg tcagcgggtg 60
gaataatctc aagaatcaaa tcatactcct tcccaaagcc tggccacaga aagtcctccc 120
ctgcccaagg gaaccgncaa gagagtactg tgtcattcaa tccgtatgag gccaggaact 180
tgcacccggg gcttgcagga caaagggccc cca gaggagg aagccctacc cntgggacac 240

agaggtgtta cggaggagcc cntacggcgg gaccccgagg gagnttcagg gcccaagggn 300
gtttttactt gggggaccga aag 323

<210> 70
<211> 2541
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2541)
<223> spleen tyrosine kinase (SYK) gene.

<400> 70
gaggaagagc cgcgggcccg gcggctgagg ccaccccggc ggcggctgga gagcgaggag 60
gagcgggtgg ccccgcgctg cgcccgccct cgcctcacct ggcgcaggtg g acacctgcg 120
caggtgtgtg ccctccggcc cctgaagcat ggccagcagc ggcatggctg acagcgccaa 180
ccacctgccc ttctttttcg gcaacatcac ccgggaggag gcagaagatt acctggtcca 240
gggggggcatg agtgatgggc tttatttgct gcgccagagc cgcaactacc tgggtggctt 300
cgccctgtcc gtggcccacg ggaggaaggc acaccactac accatcgagc gggagctgaa 360
tggcacctac gccatcgccg gtggcaggac ccatgccagc cccgccgacc tctgccacta 420
ccactcccag gagtctgatg gcctggtctg cctcctcaag aagcccttca accggcccca 480
aggggtgcag cccaagactg ggccctttga ggatttgaag gaaaacctca tcagggaata 540
tgtgaagcag acatggaacc tgcagggtca ggctctggag caggccatca tcagtcagaa 600
gcctcagctg gagaagctga tcgctaccac agcccatgaa aaaatgcctt ggttccatgg 660
aaaaatctct cgggaagaat ctgagcaaat tgtcctgata ggatcaaaga caaatggaaa 720
gttcctgatc cgagccagag acaacaacgg ctcctacgcc ctgtgcctgc tgcacgaagg 780
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agggatgaaa ggaagtgaag tcaccgctat gttagagaaa ggagagcgga tgggg tgccc 1860
tgcagggtgt ccaagagaga tgtacgatct catgaatctg tgctggacat acgatgtgga 1920
aaacaggccc ggattcgcag cagtggaact gcggctgcgc aattactact atgacgtggt 1980
gaactaaccg ctcccgcacc tgtcggtggc tgcctttgat cacaggagca atcacaggaa 2040
aatgtatcca gaggaattga ttgtcagcca cctccctctg ccagtcggga gagccaggct 2100
tggatggaac atgcccacaa cttgtcaccc aaagcctgtc ccaggactca ccctccacaa 2160
agcaaaggca gtcccgggag aaaagacgga tggcaggatc caaggggcta gctggatttg 2220
tttgttttct tgtctgtgtg attttcatac aggttatttt tacgatctgt ttccaaatcc 2280
ctttcatgtc tttccacttc tctgggtccc ggggtgcatt tgttactcat cgggcccagg 2340
gacattgcag agtggcctag agcactctca ccccaagcgg ccttttccaa atgcccaagg 2400
atgccttagc atgtgactcc tgaagggaag gcaaaggcag aggaatttgg ctgcttctac 2460
ggccatgaga ctgatccctg gccactgaaa agctttcctg aca ataaaaa tgttttgagg 2520
ctttaaaaag aaaaaaaaaa a 2541

<210> 71
<211> 312
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(312)
<223> 5' terminal sequence. interleukin 7 receptor
(IL7R) gene.

<400> 71
taacatcttt gtaagaaacc aagaaaaaat ttaaatgtga gtttcaatcc tgaaagtttc 60
ctggactgcc agattcatag ggtggatgac attcaagcta gagatgaagt ggaaggtttt 120
ctgcaagata cgtttcctca gcaactagaa gaatctga ga agcagaggct tngaggggat 180
gtgcagagcc ccaactgccc atctgaggat gtagtcatca ctccaggaaa gctttgggaa 240
ggagattcat ccctcacatg cctgggctng ggaatgttca gtgcatgtga cgcccctatt 300
tttctccttt t 312

<210> 72
<211> 1658
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1658)
<223> interleukin 7 receptor (IL7R) gene.

<400> 72
ctctctctct atctctctca gaatgacaat tctaggtaca acttttggca tggt tttttc 60
tttacttcaa gtcgtttctg gagaaagtgg ctatgctcaa aatggagact tggaagatgc 120
agaactggat gactactcat tctcatgcta tagccagttg gaagtgaatg gatcgcagca 180
ttcactgacc tgtgcttttg aggacccaga tgtcaacacc accaatctgg aatttgaaat 240
atgtggggcc ctcgtggagg taaagtgcct gaa tttcagg aaactacaag agatatattt 300
catcgagaca aagaaattct tactgattgg aaagagcaat atatgtgtga aggttggaga 360
aaagagtcta acctgcaaaa aaatagacct aaccactata gttaaacctg aggctccttt 420
tgacctgagt gtcatctatc gggaaggagc caatgacttt gtggtgacat ttaatacatc 480
acacttgcaa aagaagtatg taaaagtttt aatgcatgat gtagcttacc gccaggaaaa 540
ggatgaaaac aaatggacgc atgtgaattt atccagcaca aagctgacac tcctgcagag 600
aaagctccaa ccggcagcaa tgtatgagat taaagttcga tccatccctg atcactattt 660
taaaggcttc tggagtgaat ggagtccaag ttattacttc agaactccag aga tcaataa 720
tagctcaggg gagatggatc ctatcttact aaccatcagc attttgagtt ttttctctgt 780
cgctctgttg gtcatcttgg cctgtgtgtt atggaaaaaa aggattaagc ctatcgtatg 840
gcccagtctc cccgatcata agaagactct ggaacatctt tgtaagaaac caagaaaaaa 900
tttaaatgtg agtttcaatc ctgaaagttt c ctggactgc cagattcata gggtggatga 960
cattcaagct agagatgaag tggaaggttt tctgcaagat acgtttcctc agcaactaga 1020
agaatctgag aagcagaggc ttggagggga tgtgcagagc cccaactgcc catctgagga 1080
tgtagtcgtc actccagaaa gctttggaag agattcatcc ctcacatgcc tggctgggaa 1140
tgtcagtgca tgtgacgccc ctattctctc ctcttccagg tccctagact gcagggagag 1200
tggcaagaat gggcctcatg tgtaccagga cctcctgctt agccttggga ctacaaacag 1260
cacgctgccc cctccatttt ctctccaatc tggaatcctg acattgaacc cagttgctca 1320

gggtcagccc attcttactt ccctgggatc aaatcaagaa gaagca tatg tcaccatgtc 1380
cagcttctac caaaaccagt gaagtgtaag aaacccagac tgaacttacc gtgagcgaca 1440
aagatgattt aaaagggaag tctagagttc ctagtctccc tcacagcaca gagaagacaa 1500
aattagcaaa accccactac acagtctgca agattctgaa acattgcttt gaccactctt 1560
cctgagttca gtggcactca acatgagtca agagcatcct gcttctacca tgtggatttg 1620
gtcacaaggt ttaaggtgac ccaatgattc agctattt 1658

<210> 73
<211> 236
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(236)
<223> 3' terminal sequence. v-myc avian
myelocytomatosis viral oncogene homolog (MYC)
gene.

<400> 73
taaaaacaat agaaaaaaat caactttaaa aagcaaaatg tacttaaata aaaaaaatta 60
gggtttatag tacctataat actaggnact atatactagg attgaaa ttc tgtgtaactg 120
ctataaacgt tttattaaag ttatttacat ttaatgggca atatttacag aggaaacatt 180
gtgtaaatct taaaattttt taaaanccaa ttcttaaata ccaaatctgt taaggg 236

<210> 74
<211> 413
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(413)
<223> 5' terminal sequence. v-myc avian
myelocytomatosis viral oncogene homolog (MYC)
gene.

<400> 74
acgtctccac acatcagcac aactacgcag cgcctccctc cactcggaag gactatcctg 60
ctgccaagag ggtcaagttg gacagtgtca gagtcctgag acagatcagc aacaaccgaa 120
aatgcaccag ccccaggtcc tcggacaccg aggagaatgt caagaggcga acacacaacg 180
tcttgggagc gccagaggag gaacgagcta aaacggagct tttttgccct gcgtgaccag 240
atcccggagt tgggaaaaca atgaaaaggc ccccaaggta gttattcctt taa aaaagcc 300
acagcntaca tcctgttccg ttccaaggca ggagggagcc aaaagttcat tttnttgaag 360
gagggntttt ttttccgggn aacgacgagg aaccattttn aaacacaant ttt 413

<210> 75
<211> 2121
<212> DNA/RNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Seq uence:primer

<220>
<221> misc_feature
<222> (1)..(2121)
<223> v-myc avian myelocytomatosis viral oncogene
homolog (MYC) gene.

<400> 75
ctgctcgcgg ccgccaccgc cgggccccgg ccgtccctgg ctcccctcct gcctcgagaa 60
gggcagggct tctcagaggc ttggcgggaa aaaagaacg g agggagggat cgcgctgagt 120
ataaaagccg gttttcgggg ctttatctaa ctcgctgtag taattccagc gagaggcaga 180
gggagcgagc gggcggccgg ctagggtgga agagccgggc gagcagagct gcgctgcggg 240
cgtcctggga agggagatcc ggagcgaata gggggcttcg cctctggccc agccctcccg 300
cttgatcccc caggcca gcg gtccgcaacc cttgccgcat ccacgaaact ttgcccatag 360
cagcgggcgg gcactttgca ctggaactta caacacccga gcaaggacgc gactctcccg 420
acgcggggag gctattctgc ccatttgggg acacttcccc gccgctgcca ggacccgctt 480
ctctgaaagg ctctccttgc agctgcttag acgctggatt tttttcgggt agtggaaaa c 540
cagcagcctc ccgcgacgat gcccctcaac gttagcttca ccaacaggaa ctatgacctc 600
gactacgact cggtgcagcc gtatttctac tgcgacgagg aggagaactt ctaccagcag 660
cagcagcaga gcgagctgca gcccccggcg cccagcgagg atatctggaa gaaattcgag 720
ctgctgccca ccccgcccct gtcccctagc cgccgct ccg ggctctgctc gccctcctac 780
gttgcggtca caccttctc ccttcgggga gacaacgacg gcggtggcgg gagcttctcc 840
acggccgacc agctggagat ggtgaccgag ctgctgggag gagacatggt gaaccagagt 900
ttcatctgcg acccggacga cgagaccttc atcaaaaaca tcatcatcca ggactgtatg 960
tggagcggct tctcg gccgc cgccaagctc gtctcagaga agctggcctc ctaccaggct 1020
gcgcgcaaag acagcggcag cccgaacccc gcccgcggcc acagcgtctg ctccacctcc 1080
agcttgtacc tgcaggatct gagcgccgcc gcctcagagt gcatcgaccc ctcggtggtc 1140
ttcccctacc ctctcaacga cagcagctcg cccaagtcct gcgcctcgca agac tccagc 1200
gccttctctc cgtcctcgga ttctctgctc tcctcgacgg agtcctcccc gcagggcagc 1260
cccgagcccc tggtgctcca tgaggagaca ccgcccacca ccagcagcga ctctgaggag 1320
gaacaagaag atgaggaaga aatcgatgtt gtttctgtgg aaaagaggca ggctcctggc 1380
aaaaggtcag agtctggatc accttctgc t ggaggccaca gcaacctcc tcacagccca 1440
ctggtcctca agaggtgcca cgtctccaca catcagcaca actacgcagc gcctccctcc 1500
actcggaagg actatcctgc tgccaagagg gtcaagttgg acagtgtcag agtcctgaga 1560
cagatcagca acaaccgaaa atgcaccagc cccaggtcct cggacaccga ggagaatgtc 1620
aagaggcgaa cacacaacgt cttggagcgc cagaggagga acgagctaaa acggagcttt 1680
tttgccctgc gtgaccagat cccggagttg gaaaacaatg aaaaggcccc caaggtagtt 1740
atccttaaaa aagccacagc atacatcctg tccgtccaag cagaggagca aaagctcatt 1800
tctgaagagg acttgttgcg gaaacgacga gaacagttga aa cacaaact tgaacagcta 1860
cggaactctt gtgcgtaagg aaaagtaagg aaaacgattc cttctaacag aaatgtcctg 1920
agcaatcacc tatgaacttg tttcaaatgc atgatcaaat gcaacctcac aaccttggct 1980
gagtcttgag actgaaagat ttagccataa tgtaaactgc ctcaaattgg actttgggca 2040
taaaagaact tttttat gct taccatcttt tttttttctt taacagattt gtatttaaga 2100
attgttttta aaaaatttta a 2121

<210> 76
<211> 260
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(260)
<223> 3' terminal sequence. gata -binding protein 3
(GATA3) gene.

<400> 76
tcacagcact agagaccctg ttaaataggg gatatgagtc agaatggctt attcacagat 60
ggggtccaga ttcagtggtt ggaacacaga caccacagtg agctcctttg caaagtggca 120
aacataattt tgctttctgc cttcaaaaac atatatccat cgcgtttagg cttcatgata 180
ctgctcctgc aaaaatgcaa gtcgaaaggg actgcaggga ctctcgctgg ggggccctgt 240
gagcatcgag cagggctctt 260

<210> 77
<211> 409
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(409)
<223> 5' terminal sequence. gata -binding protein 3
(GATA3) gene.

<400> 77
cattctggtt catagatggc atcttttcac tgtgttctca cattggtgga aaggaagaac 60
tctggtttct tcacttcctt ataagggcac caatcttatt cacgagggct tcaccctcga 120
aataatcacg tcctcaaaac ccccaccttc taatattcta ataccatcac gtgagggctt 180
aggtttcaac ataagaattc ggtggtggtn gggttngggg gagagggaaa caaacatcca 240
gaccagaaac cgaaaaatgt ctagcaaatc caaaaagtgc aaaaaagt gc atgactcact 300
ggaggacttc cccaagganc agctncgttt taacccgggc cgccctttc caggacacat 360
gttccttccc tggnggccac atnttggncc ttnaggccan tccagggca 409

<210> 78
<211> 2365
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artifici al Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2365)
<223> gata-binding protein 3 (GATA3) gene.

<400> 78
tcccagcctt cccatccccc caccgaaagc aaatcattca acgacccccg accctccgac 60
ggcaggagcc ccccgacctc ccaggcggac cgcccttccc tccccgcgcg ggttccgggc 120
ccggcgagag ggcgcgacga cagccgaggc catggaggtg acggcggacc agccgcgctg 180
ggtgagccac caccaccccg ccgtgctcaa cgggcagcac ccggacacgc accaccccgg 240
cctcagccac tcctacatgg acgcggcgca gtacccgctg ccggaggagg tggatgtgct 300
ttttaacatc gacggtcaag gcaaccacgt cccgccctac ta cggaaact cggtcagggc 360
cacggtgcag aggtaccctc cgacccacca cgggagccag gtgtgccgcc cgcctctgct 420
tcatggatcc ctaccctggc tggacggcgg caaagccctg ggcagccacc acaccgcctc 480
cccctggaat ctcagcccct tctccaagac gtccatccac cacggctccc cggggcccct 540
ctccgtctac cccccggcct cgtcctcctc cttgtcgggg ggccacgcca gcccgcacct 600
cttcaccttc ccgccaccc cgccgaagga cgtctccccg gacccatcgc tgtccacccc 660
aggctcggcc ggctcggccc ggcaggacga gaaagagtgc ctcaagtacc aggtgcccct 720
gcccgacagc atgaagctgg agtcgtccca ctcccgtggc agcatgaccg ccctgggtgg 78 0
agcctcctcg tcgacccacc accccatcac cacctacccg ccctacgtgc ccgagtacag 840
ctccggactc ttcccccca gcagcctgct gggcggctcc cccaccggct tcggatgcaa 900

gtccaggccc aaggcccggt ccagcacagg cagggagtgt gtgaactgtg gggcaacctc 960
gaccccactg tggcggcgag atggcacggg acactacctg tgcaacgcct gcgggctcta 1020
tcacaaaatg aacggacaga accggcccct cattaagccc aagcgaaggc tgtctgcagc 1080
caggagagca gggacgtcct gtgcgaactg tcagaccacc acaaccacac tctggaggag 1140
gaatgccaat ggggaccctg tctgcaatgc ctgtgggctc tactacaagc ttcacaatat 1200
taacagaccc ctgactatga agaaggaagg catccagacc agaaaccgaa aaatgtctag 1260
caaatccaaa aagtgcaaaa aagtgcatga ctcactggag gacttcccca agaacagctc 1320
gtttaacccg gccgccctct ccagacacat gtcctccctg agccacatct cgcccttcag 1380
ccactccagc cacatgctga ccacgcccac gccgatgcac ccgccatcca gcct gtcctt 1440
tggaccacac cacccctcca gcatggtcac cgccatgggt tagagccctg ctcgatgctc 1500
acagggcccc cagcgagagt ccctgcagtc cctttcgact tgcatttttg caggagcagt 1560
atcatgaagc ctaaacgcga tggatatatg tttttgaagg cagaaagcaa aattatgttt 1620
gccactttgc aaaggagctc actgtggtg t ctgtgttcca accactgaat ctggacccca 1680
tctgtgaata agccattctg actcatatcc cctatttaac agggtctcta gtgctgtgaa 1740
aaaaaaaaat cctgaacatt gcatataact tatattgtaa gaaatactgt acaatgactt 1800
tattgcatct gggtagctgt aaggcatgaa ggatgccaag aagtttaagg aatatgggag 1860
aaatagtgtg gaaattaaga agaaactagg tctgatattc aaatggacaa actgccagtt 1920
ttgtttcctt tcactggcca cagttgtttg atgcattaaa agaaaataaa aaaaagaaaa 1980
aagagaaaag aaaaaaaaag aaaaaagttg taggcgaatc atttgttcaa agctgttggc 2040
cctctgcaaa ggaaatacca gttctgggca atcagtgtta cc gttcacca gttgccattg 2100
agggtttcag agagcctttt tctaggccta catgctttgt gaacaagtcc ctgtaattgt 2160
tgtttgtatg tataattcaa agcaccaaaa taagaaaaga tgtagattta tttcatcata 2220
ttatacagac cgaactgttg tataaattta tttactgcta gtcttaagaa ctgctttctt 2280
tcgtttgttt gtttcaatat tttccttctc tctcaatttt cggttgaata aactagatta 2340
cattcagttg gcaaaaaaaa aaaaa 2365

<210> 79
<211> 328
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(328)
<223> 3' terminal sequence. growth factor
receptor-bound protein 7 (GRB7) gene.

<400> 79
ttgtatnttt naaataatct ttattgtcac tagtataaaa cagagcagat caactggcct 60
ctcggtctgt acaaagtgtg gggcgtgaaa ccgctgggct gcccccactt ctcccataat 120
tccctgccct agagcagcag ctccagagct aggagaagga gagggggcca cccaaggcct 180
tcccttgagg agaggggtca ggagtggact ggagtggggg ctgttttcta tctgagggag 240
gcaaagaagc agaggagaaa actggagtgg cggaaccctc ccgntcctca tcccgtcccc 300
tgtggccgat cccanagtcc actnggat 328

<210> 80
<211> 428
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(428)

<223> 5' terminal sequence. growth factor
receptor-bound protein 7 (GRB7) gene.

<400> 80
ggctccccac ccttgagaag tgcctcagat aataccctgg tggccatgga cttctctggc 60
catgctgggc gtgtcattga gaacccccgg gaggctctga gtgtggccct ggaggaggcc 120
caggcctgga ggaagaagac aaaccaccgc ctcagcctgc ccatgccagc ctccggacga 180
gcctcagtgc agccatccac cgcacccaac tctggttcca cgggcgcatt tcccgtgagg 240
agagccagcg tttattggga cagcagggct tngtagacgg cctgttcctg ggtccgggag 300
agtcagcggg aacccccagg ggtttttcct ctttttnttg ccaccttgca gaaagtgaag 360
cnttattttc attccttgcc gagcgaagga ggaagggccg cttttatttt aagcattggt 42 0
tgattggc 428

<210> 81
<211> 2205
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2205)
<223> growth factor receptor-bound protein 7
(GRB7) gene.

<400> 81
cacagggctc ccccccgcct ctgacttctc tgtccgaagt cgggacaccc tcctaccacc 60
tgtagagaag cgggagtgga tctgaaataa aatccaggaa tctgggggtt cctagacgga 120
gccagacttc ggaacgggtg tcctgctact cctgctgggg ctcctccagg acaagggca c 180
acaactggtt ccgttaagcc cctctctcgc tcagacgcca tggagctgga tctgtctcca 240
cctcatctta gcagctctcc ggaagacctt tggccagccc ctgggacccc tcctgggact 300
ccccggcccc ctgataccc tctgcctgag gaggtaaaga ggtcccagcc tctcctcatc 360
ccaaccaccg gcaggaaact tcgagaggag gagaggc gtg ccacctccct cccctctatc 420
cccaacccct tccctgagct ctgcagtcct ccctcacaga gcccaattct cgggggcccc 480
tccagtgcaa gggggctgct cccccgcgat gccagccgcc cccatgtagt aaaggtgtac 540
agtgaggatg gggcctgcag gtctgtggag gtggcagcag gtgccacagc tcgccacgtg 600
tgtgaaatgc tggtg cagcg agctcacgcc ttgagcgacg agacctgggg gctggtggag 660
tgccaccccc acctagcact ggagcggggt ttggaggacc acgagtccgt ggtggaagtg 720
caggctgcct ggcccgtggg cggagatagc cgcttcgtct tccggaaaaa cttcgccaag 780
tacgaactgt tcaagagctc cccacactcc ctgttcccag aaaaaatggt ctccagc tgt 840
ctcgatgcac acactggtat atcccatgaa gacctcatcc agaacttcct gaatgctggc 900
agctttcctg agatccaggg ctttctgcag ctgcggggtt caggacggaa gctttggaaa 960
cgctttttct gtttcttgcg ccgatctggc ctctattact ccaccaaggg cacctctaag 1020
gatccgaggc acctgcagta cgtggcagat gtga acgagt ccaacgtgta cgtggtgacg 1080
cagggccgca agctctacgg gatgcccact gacttcggtt tctgtgtcaa gcccaacaag 1140
cttcgaaatg gacacaaggg gcttcggatc ttctgcagtg aagatgagca gagccgcacc 1200
tgctggctgg ctgccttccg cctcttcaag tacggggtgc agctgtacaa gaattaccag 1260
caggcacagt ctcgccatct gcatccatct tgtttgggct ccccaccctt gagaagtgcc 1320
tcagataata ccctggtggc catggacttc tctggccatg ctgggcgtgt cattgagaac 1380
ccccgggagg ctctgagtgt ggccctggag gaggcccagg cctggaggaa gaagacaaac 1440
caccgcctca gcctgcccat gccagcctcc ggcacgagcc tcagtgca gc catccaccgc 1500
acccaactct ggttccacgg gcgcatttcc cgtgaggaga gccagcggct tattggacag 1560
cagggcttgg tagacggcct gttcctggtc cgggagagtc agcggaaccc ccagggcttt 1620
gtcctctctt tgtgccacct gcagaaagtg aagcattatc tcatcctgcc gagcgaggag 1680
gagggtcgcc tgtacttcag ca tggatgat ggccagaccc gcttcactga cctgctgcag 1740
ctcgtggagt tccaccagct gaaccgcggc atcctgccgt gcttgctgcg ccattgctgc 1800
acgcgggtgg ccctctgacc aggccgtgga ctggctcatg cctcagcccg ccttcaggct 1860
gcccgccgcc cctccaccca tccagtggac tctggggcgc ggccacaggg gacgggatga 1 920

ggagcgggag ggttccgcca ctccagtttt ctcctctgct tctttgcctc cctcagatag 1980
aaaacagccc ccactccagt ccactcctga cccctctcct caagggaagg ccttgggtgg 2040
ccccctctcc ttctcctagc tctggaggtg ctgctctagg gcagggaatt atgggagaag 2100
tgggggcagc ccaggcggtt tcacgcccca cacttt gtac agaccgagag gccagttgat 2160
ctgctctgtt ttatactagt gacaataaag attatttttt gatac 2205

<210> 82
<211> 313
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(313)
<223> 5' terminal sequence. topoisomerase (dna) ii
beta (180kd) (TOP2B) gene.

<400> 82
gaaatttgac agtaatgaag aagattctgc ttctgttttt tcaccatcat ttggtctgaa 60
acagacagat aaagttccaa gtaaaacggt agctgctaaa aagggtatgt acttatattt 120
gattgagtta agcattgg at agagatagtt aatgtaaaag gaaatgtaat ttaatttgaa 180
actatttgca ttttttatc ataaaacaat taaggaagta taagtgctta taaggaggac 240
ctctcgtttt ctagccatct gagggcgtta ataaatttct gtaggactta ntttaaagct 300
gttgtanttt taa 313

<210> 83
<211> 4866
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(4866)
<223> topoisomerase (dna) ii beta (180kd) (TOP2B)
gene.

<400> 83
atggccaagt cgggtggctg cggcgcggga gccggcgtgg gcggcggcaa cggggcactg 60
acctgggtga acaatgctgc aaaaaaagaa gagtcagaaa ctgccaacaa aaatgattct 120
tcaaagaagt tgtctgttga gagagtgtat cagaagaaga cacaacttga acacattctt 180
cttcgtcctg atacatatat tgggtcagtg gagccattga cgcagttcat gtgggtgt at 240
gatgaagatg taggaatgaa ttgcagggag gttacctttg tgccaggttt atacaagatc 300
tttgatgaaa ttttggttaa tgctgctgac aataaacaga gggataagaa catgacttgt 360
attaaagttt ctattgatcc tgaatctaac attataagca tttggaataa tgggaaaggc 420
attccagtag tagaacacaa ggtagagaaa gtttat gttc ctgctttaat ttttggacag 480
cttttaacat ccagtaacta tgatgatgat gagaaaaaag ttacaggtgg tcgtaatggt 540
tatggtgcaa aactttgtaa tattttcagt acaaagttta cagtagaaac agcttgcaaa 600
gaatacaaac acagttttaa gcagacatgg atgaataata tgatgaagac ttctgaagcc 660
aaaattaaac attttgatgg tgaagattac acatgcataa cattccaacc agatctgtcc 720
aaatttaaga tggaaaaact tgacaaggat attgtggccc tcatgactag aagggcatat 780
gatttggctg gttcgtgtag aggggtcaag gtcatgttta atggaaagaa attgcctgta 840
aatggatttc gcagttatgt agatctttat gtgaaagaca aattggatga aactgg ggtg 900
gccctgaaag ttattcatga gcttgcaaat gaaagatggg atgtttgtct cacattgagt 960

gaaaaaggat tccagcaaat cagctttgta aatagtattg caactacaaa aggtggacgg 1020
cacgtggatt atgtggtaga tcaagttgtt ggtaaactga ttgaagtagt taagaaaaag 1080
aacaaagctg gtgtatcagt gaaaccattt ca agtaaaaa accatatatg ggtttttatt 1140
aattgcctta ttgaaaatcc aacttttgat tctcagacta aggaaaacat gactctgcag 1200
cccaaaagtt ttgggtctaa atgccagctg tcagaaaaat tttttaaagc agcctctaat 1260
tgtggcattg tagaaagtat cctgaactgg gtgaaattta aggctcagac tcagctgaat 1320
aagaagtgtt catcagtaaa atacagtaaa atcaaaggta ttcccaaact ggatgatgct 1380
aatgatgctg gtggtaaaca ttccctggag tgtacactga tattaacaga gggagactct 1440
gccaaatcac tggctgtgtc tggattaggt gtgattggac gagacagata cggagttttt 1500
ccactcaggg gcaaaattct taatgtacgg gaagcttctc ataaac agat catggaaaat 1560
gctgaaataa ataatattat taaaatagtt ggtctacaat ataagaaaag ttacgatgat 1620
gcagaatctc tgaaaacctt acgctatgga aagattatga ttatgaccga tcaggatcaa 1680
gatggttctc acataaaagg cctgcttatt aatttcatcc atcacaattg gccatcactt 1740
ttgaagcatg gttttcttga agagttcatt actcctattg taaaggcaag caaaaataag 1800
caggaacttt ccttctacag tattcctgaa tttgacgaat ggaaaaaaca tatagaaaac 1860
cagaaagcct ggaaaataaa gtactataaa ggattgggta ctagtacagc taaagaagca 1920
aaggaatatt ttgctgatat ggaaaggcat cgcatcttgt ttagatatgc tggtcctgaa 1980
gatgatgctg ccattacctt ggcatttagt aagaagaaga ttgatgacag aaaagaatgg 2040
ttaacaaatt ttatggaaga ccggagacag cgtaggctac atggcttacc agagcaattt 2100
ttatatggta ctgcaacaaa gcatttgact tataatgatt tcatcaacaa ggaattgatt 2160
ctcttctcaa actcagacaa tgaaagatct atac catctc ttgttgatgg ctttaaacct 2220
ggccagcgga aagttttatt tacctgtttc aagaggaatg ataaacgtga agtaaaagtt 2280
gcccagttgg ctggctctgt tgctgagatg tcggcttatc atcatggaga acaagcattg 2340
atgatgacta ttgtgaattt ggctcagaac tttgtgggaa gtaacaacat taacttgctt 2400
cagcctattg gtcagtttgg aactcggctt catggtggca aagatgctgc aagccctcgt 2460
tatattttca caatgttaag cactttagca aggctacttt ttcctgctgt ggatgacaac 2520
ctccttaagt tcctttatga tgataatcaa cgtgtagagc ctgagtggta tattcctata 2580
attcccatgg ttttaataaa tggtgctgag ggcattggta ctggatgg gc ttgtaaacta 2640
cccaactatg atgctaggga aattgtgaac aatgtcagac gaatgctaga tggcctggat 2700
cctcatccca tgcttccaaa ctacaaaaac tttaaaggca cgattcaaga acttggtcaa 2760
aaccagtatg cagtcagtgg tgaaatattt gtagtggaca gaaacacagt agaaattaca 2820
gagcttccag ttagaacttg ga cacaggta tataaagaac aggttttaga acctatgcta 2880
aatggaacag ataaaacacc agcattaatt tctgattata aagaatatca tactgacaca 2940
actgtgaaat ttgtggtgaa aatgactgaa gagaaactag cacaagcaga agctgctgga 3000
ctgcataaag tttttaaact tcaaactact cttacttgta attccatggt actttttgat 3 060
catatgggat gtctgaagaa atatgaaact gtgcaagaca ttctgaaaga attctttgat 3120
ttacgattaa gttattacgg tttacgtaag gagtggcttg tgggaatgtt gggagcagaa 3180
tctacaaagc ttaacaatca agcccgtttc attttagaga agatacaagg gaaaattact 3240
atagagaata ggtcaaagaa agatttgatt caaatg ttag tccagagagg ttatgaatct 3300
gacccagtga aagcctggaa agaagcacaa gaaaaggcag cagaagagga tgaaacacaa 3360
aaccagcatg atgatagttc ctccgattca ggaactcctt caggcccaga ttttaattat 3420
attttaaata tgtctctgtg gtctcttact aaagaaaaag ttgaagaact gattaaacag 3480
agagatgcaa aagggcgaga ggtcaatgat cttaaaagaa aatctccttc agatctttgg 3540
aaagaggatt tagcggcatt tgttgaagaa ctggataaag tggaatctca agaacgagaa 3600
gatgttctgg ctggaatgtc tggaaaagca attaaaggta aagttggcaa acctaaggtg 3660
aagaaactcc agttggaaga gacaatgccc tcaccttatg gcagaagaat aattcctgaa 3720
attacagcta tgaaggcaga tgccagcaaa aagttgctga agaagaagaa gggtgatctt 3780
gatactgcag cagtaaaagt ggaatttgat gaagaattca gtggagcacc agtagaaggt 3840
gcaggagaag aggcattgac tccatcagtt cctataaata aaggtcccaa acctaagagg 3900
gagaagaagg agcctggtac caga gtgaga aaaacaccta catcatctgg taaacctagt 3960
gcaaagaaag tgaagaaacg gaatccttgg tcagatgatg aatccaagtc agaaagtgat 4020
ttggaagaaa cagaacctgt ggttattcca agagattctt tgcttaggag agcagcagcc 4080
gaaagaccta aatacacatt tgatttctca gaagaagagg atgatgatgc tgatgatgat 414 0
gatgatgaca ataatgattt agaggaattg aaagttaaag catctcccat aacaaatgat 4200
ggggaagatg aatttgttcc ttcagatggg ttagataaag atgaatatac attttcacca 4260
ggcaaatcaa aagccactcc agaaaaatct ttgcatgaca aaaaaagtca ggattttgga 4320
aatctcttct catttccttc atattctcag aagtcaga ag atgattcagc taaatttgac 4380
agtaatgaag aagattctgc ttctgttttt tcaccatcat ttggtctgaa acagacagat 4440
aaagttccaa gtaaaacggt agctgctaaa aagggaaaac cgtcttcaga tacagtccct 4500
aagcccaaga gagccccaaa acagaagaaa gtagtagagg ctgtaaactc tgactcggat 4560
tcagaatttg gcattccaaa gaagactaca acaccaaaag gtaaaggccg aggggcaaag 4620

aaaaggaaag catctggctc tgaaaatgaa ggcgattata accctggcag gaaaacatcc 4680
aaaacaacaa gcaagaaacc gaagaagaca tcttttgatc aggattcaga tgtggacatc 4740
ttcccctcag acttccctac tgagccacct tctctgccac gaaccggtcg g gctaggaaa 4800
gaagtaaaat attttacaga gtctgatgaa gaagaagatg atgttgattt tgcaatgttt 4860
aattaa 4866

<210> 84
<211> 311
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Seq uence:primer

<220>
<221> misc_feature
<222> (1)..(311)
<223> 3' terminal sequence. caspase 4,
apoptosis-related cysteine protease (CASP4) gene.

<400> 84
cacttttatt gaaatacaaa atgttaaata tgcaagctgt actaatgaag gtgctccttg 60
aagttgatta aggagggctg gg ctgcttgt ggcttccatt ttcaattgcc aggaaagagg 120
tagaaatatc ttgtcatgga cagtcgttct atggtgggca tttgagcttt ggccccttga 180
gtttcaaatg attgctgtac cttccgaaat acttcctcta ggtggcagca ccaagaatat 240
ttctgggaag catgtgatga gttgtgtgat gaagatagag ccccattgtg ctgtctctcc 300
cagggcacgt t 311

<210> 85
<211> 1291
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1291)
<223> caspase 4, apoptosi s-related cysteine
protease (CASP4) gene.

<400> 85
gctctttcca acgctgtaaa aaaggacaga ggctgttccc tatggcagaa ggcaaccaca 60
gaaaaaagcc acttaaggtg ttggaatccc tgggcaaaga tttcctcact ggtgttttgg 120
ataacttggt ggaacaaaat gtactgaact ggaaggaaga ggaaaaaaag aa atattacg 180
atgctaaaac tgaagacaaa gttcgggtca tggcagactc tatgcaagag aagcaacgta 240
tggcaggaca aatgcttctt caaacctttt ttaacataga ccaaatatcc cccaataaaa 300
aagctcatcc gaatatggag gctggaccac ctgagtcagg agaatctaca gatgccctca 360
agctttgtcc tcatgaagaa ttcctgagac tatgtaaaga aagagctgaa gagatctatc 420
caataaagga gagaaacaac cgcacacgcc tggctctcat catatgcaat acagagtttg 480
accatctgcc tccgaggaat ggagctgact ttgacatcac agggatgaag gagctacttg 540
agggtctgga ctatagtgta gatgtagaag agaatctgac agccagggat atggagtcag 600
cgctgagggc atttgctacc agaccagagc acaagtcctc tgacagcaca ttcttggtac 660
tcatgtctca tggcatcctg gagggaatct gcggaactgt gcatgatgag aaaaaaccag 720
atgtgctgct ttatgacacc atcttccaga tattcaacaa ccgcaactgc ctcagtctga 780
aggacaaacc caaggtcatc attgtccagg cctgcagagg tgcaaaccgt ggggaactgt 840
gggtcagaga ctctccagca tccttggaag tggcctcttc acagtcatct gagaacctgg 900
aggaagatgc tgtttacaag acccacgtgg agaaggactt cattgctttc tgctcttcaa 960

cgccacacaa cgtgtcctgg agagacagca caatgggctc tatcttcatc acacaactca 1020
tcacatgctt ccagaaatat tcttggtg ct gccacctaga ggaagtattt cggaaggtac 1080
agcaatcatt tgaaactcca agggccaaag ctcaaatgcc caccatagaa cgactgtcca 1140
tgacaagata tttctacctc tttcctggca attgaaaatg gaagccacaa gcagcccagc 1200
cctccttaat caacttcaag gagcaccttc attagtacag cttgcatatt taacattttg 1260
tatttcaata aaagtgaaga caaaaaaaaa a 1291

<210> 86
<211> 319
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(319)
<223> 5' terminal sequence. tiss ue inhibitor of
metalloproteinase 2 (TIMP2) gene.

<400> 86
tggacccatg ggatgagtgt tttattcatg ctgtttccag gaagggatgt cagagctgga 60
ccagtcgaaa cccttggagg ctttttttgc agttggccac aggggcgttg gaggcctgct 120
tatgggtcct cgatgtcgag aaactcctgc ttggnggacn ccgcg ccgcg tnnccacgca 180
caggagccnt cacttctctt gatgcaggcg aagaacttgg cctggnnccc gttnatgttc 240
ttctctgtga cccagtccat ccagaggcac tcgtccgggg agganatgta gcacgggatc 300
atngggcanc gcgtgatct 319

<210> 87
<211> 1075
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1075)
<223> tissue inhibitor of metalloproteinase 2
(TIMP2) gene.

<400> 87
cgcagcaaac acatccgtag aaggcagcgc ggccgccga g agccgcagcg ccgctcgccc 60
gccgcccccc accccgccgc cccgccccggc gaattgcgcc ccgcgcccct cccctcgcgc 120
ccccgagaca aagaggagag aaagtttgcg cggccgagcg gggcaggtga ggagggtgag 180
ccgcgcggga ggggcccgcc tcggccccgg ctcagccccc gcccgcgccc ccagcccgcc 240
gccgcgagca gcgcccgg ac cccccagcgg cggcccccgc ccgcccagcc ccccggcccg 300
ccatgggcgc cgcggcccgc accctgcggc tggcgctcgg cctcctgctg ctggcgacgc 360
tgcttcgccc ggccgacgcc tgcagctgct ccccggtgca cccgcaacag gcgttttgca 420
atgcagatgt agtgatcagg gccaaagcgg tcagtgagaa ggaagtggac tctggaaacg 480
acatttatgg caaccctatc aagaggatcc agtatgagat caagcagata aagatgttca 540
aagggcctga gaaggatata gagtttatct acacggcccc ctcctcggca gtgtgtgggg 600
tctcgctgga cgttggagga aagaaggaat atctcattgc aggaaaggcc gaggggacg 660
gcaagatgca catcaccctc tgtgacttca tcgtgccc tg ggacaccctg agcaccaccc 720
agaagaagag cctgaaccac aggtaccaga tgggctgcga gtgcaagatc acgcgctgcc 780
ccatgatccc gtgctacatc tcctccccgg acgagtgcct ctggatggac tgggtcacag 840
agaagaacat caacgggcac caggccaagt tcttcgcctg catcaagaga agtgacggct 900

cctgtgcgtg gtaccg cggc gcggcgcccc ccaagcagga gtttctcgac atcgaggacc 960
cataagcagg cctccaacgc ccctgtggcc aactgcaaaa aaagcctcca agggtttcga 1020
ctggtccagc tctgacatcc cttcctggaa acagcatgaa taaaacactc atccc 1075

<210> 88
<211> 225
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(225)
<223> 3' terminal sequence. d-dopachrome
tautomerase (DDT) gene.

<400> 88
ttttttgaat gaggaagctc tcttcattta tttcanatga ggatgaagaa gaggattatg 60
tgancacagg aatnttgcat gcgggataat ccaaagctgg ttatctccag gncctcantn 120
tgccaagaga tctctctgga agaagcagcc agttcacaga tgccctggat ccctccgtgc 180
ccaatcataa aaaagtcatg accgtcccta tnttgccaat ntgcc 225

<210> 89
<211> 312
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(312)
<223> 5' terminal sequence. d-dopachrome
tautomerase (DDT) gene.

<400> 89
cgttcctgga gctggacacg aatttgcccg ccaaccgagt gcccgcgggn tgngagaaac 60
gactctgcgc cgccgctgcc tccatcctgg gcaaacctgc ggaccgcgtg aacgtgacgg 120
tacggccggg cctggccatg gcgctgagcg ggtccaccga gccctgcgcg cagtgttcca 180
tctcctccat cggcgtagtg gggcaccgcg agggacaacc gcagccacag cgcccatttc 240
ttttgagttt tttcaccaag gagctaagcc cctgccaggg acccgat ant tattccnttt 300
ttttcccttt gg 312

<210> 90
<211> 666
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(666)
<223> d-dopachrome tautomerase (DDT) gene.

<400> 90
gatcccggtg ccagggaccc tgcccagttc caggcgtcgc ctaacccaga aacgactggg 60
cgccgcgtcc tggaaaggcc ccagcgcacg gacatctgag gagctgtttc cgttcctctg 120
cccgccatgc cgttcctgga gctggacacg aatttgcccg ccaaccgagt gcccgcgggg 180
ctggagaaac gactctgcgc cgccgctgcc tccatcctgg gcaaacctgc ggaccgcgtg 240
aacgtgacgg tacggccggg cctggccatg gcgctgagcg ggtccaccga gccctgcgcg 300
cagctgtcca tctcctccat cggcgtagtg ggcaccgcgg aggacaaccg cagccacagc 360
gcccacttct ttgagtttct caccaaggag ctagccctgg gcc aggaccg gatacttatc 420
cgcttttttcc ccttggagtc ctggcagatt ggcaagatag ggacggtcat gacttttttа 480
tgattgggca cggagggatc cagggcatct gtgaactggc tgcttcttcc agagagatct 540
cttggcagag tgagggcctg gagataacca gctttggatt atcccgcatg caacattcct 600
gtgatcacat aatcctcttc t tcatcctca tatgaaataa atgaagagag cttcctcatt 660
caaaaa 666

<210> 91
<211> 443
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(443)
<223> 3' terminal sequence. prolactin (PRL) gene.

<400> 91
gantttgatg tctctaagga gtcagttttt atttttaag aggagacctg ttacacccaa 60
gcatggattc aaaagagata caactaaaag aagcttgcaa tggaacggat cattaaggac 120
cttctcagaa atagatgaaa tggatgtggg cttagca gtt gttgttgtgg atgattcggg 180
cacttcaggg agcttgagga taattgtcga ttttatgtga atccctgcgt aggcaatggg 240
agaggttata ataaggcagg aaagggcgag actcttcatc agccatctgc aggggatggg 300
aagtccccga cccagacagg gtagatctca ttttctttgg gttttcaggg atgaacctgg 360
gcttgactat ccagc ttcca tgncctctt ggaagccctt ttggttttgc tccctcaatc 420
ttctacagct tttgggttag ggt 443

<210> 92
<211> 243
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_fe ature
<222> (1)..(243)
<223> 5' terminal sequence. prolactin (PRL) gene.

<400> 92
gaagaatcgg aacatacagg ctttgatatc aaaggtttat aaagccaata tctgggaaag 60
agaaaaccgt gagacttcca gatcttctct ggtgaagtgt gtttcctgca acgatcacga 120
acatgaacat caaaggatcg ccatgggaaa gggtccctcc tgctgctgct gggtgttcaa 180
acctgctcct gtgccagagc gtgggccccc ttggcccatc tgtcccggnc gggcttgccc 240
gat 243

<210> 93
<211> 833
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(833)
<223> prolactin (PRL) gene.

<400> 93
aaacatgaac atcaaaggat cgccatggaa agggtccctc ctgctgctgc tggtgtcaaa 60
cctgctgctg tgccagagcg tggccccctt gcccatctgt cccggcgggg ctgcccgatg 12 0
ccaggtgacc cttcgagacc tgtttgaccg cgccgtcgtc ctgtcccact acatccataa 180
cctctcctca gaaatgttca gcgaattcga taaacggtat acccatggcc gggggttcat 240
taccaaggcc atcaacagct gccacacttc ttcccttgcc acccccgaag acaaggagca 300
agcccaacag atgaatcaaa aagactttct gagcctgata gtcagcatat tgcgatcctg 360
gaatgagcct ctgtatcatc tggtcacgga agtacgtggt atgcaagaag ccccggaggc 420
tatcctatcc aaagctgtag agattgagga gcaaaccaaa cggcttctag agggcatgga 480
gctgatagtc agccaggttc atcctgaaac caaagaaaat gagatctacc ctgtctggtc 540
gggacttcca tccctgcag a tggctgatga agagtctcgc ctttctgctt attataacct 600
gctccactgc ctacgcaggg attcacataa aatcgacaat tatctcaagc tcctgaagtg 660
ccgaatcatc cacaacaaca actgctaagc ccacatccat ttcatctatt tctgagaagg 720
tccttaatga tccgttccat tgcaagcttc ttttagttgt atctcttttg aatccatgct 780
tgggtgtaac aggtctcctc ttaaaaaata aaaactgact cgttagagac atc 833

<210> 94
<211> 304
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(304)
<223> 3' terminal sequence. prolactin receptor
(PRLR) gene.

<400> 94
actaagcagt gtgcttttat ttcattgaac acatagtttt ataactaaca gcaaaaagta 60
aatctacaaa tcacagttag gaaacataat gatttgttct ggaatcagct gctggagaaa 120
gaggcaagtg gttaaaaatg gagcatgaaa ggagctggga gctttagtag tgtcagtctg 180
actacattct tgaggcattt cacgtactct gtagtgttac ctgaagaaaa atcacatttt 240
aaccaatcat tccattagtc aagctatcag tgaaaggagt gtgtaaaaca tgcgggatcc 300
cggg 304

<210> 95
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(366)
<223> 5' terminal sequence. prolactin receptor (PRLR) gene.

<400> 95
gaggtcattg agaagccaga gaatcctgaa acancccaca cctggaaccc ccantgcata 60
agcatggaag gcaaaatccc ctatttncat gctggtggat ccaaatgttc aacatggccc 120
ttaccacagc ccagccagca caaccccaga tcctcttacc acaatattac tgatgtgtgt 180
gagctggctg tgggccctgc aggtgcaccg gccactctgt tgaatgaagc aggtaaagat 240
gctttaaaat cctctcaaac cattaagtct agagangag g gnaaggcaac ccaggcagag 300
ggaggtagga aagcttccat tcttgagnac tgaccagggt tacgncctgg gttgcttgcc 360
ccaggg 366

<210> 96
<211> 2723
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2723)
<223> prolactin receptor (PRLR) gene.

<400> 96
ggaggctgaa atccccagac gccggttttc tgggctgggc tttctgctta ctcactcctt 60
ctccctcttt ctggatttta ccgaccgttc gcgaaacagc tttccacaca atggagcttc 120
atgtcctcgt gcaggaagta ctcatcgact gatgtggcag actttgctcc ctgacaaaac 180
taaagaactc tcctattcat ggaggcgaac actgaggatg ctttccacat gaaccctgaa 240
gtgaacttct gatacatttc ctgcagcaag agaaggcagc caacatgaag gaaaatgtgg 300
catctgcaac cgttttcact ctgctacttt ttctcaac ac ctgccttctg aatggacagt 360
tacctcctgg aaaacctgag atctttaaat gtcgttctcc caataaggaa acattcacct 420
gctggtggag gcctgggaca gatggaggac ttcctaccaa ttattcactg acttaccaca 480
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gccactttgg caagca gtac acctccatgt ggaggacata catcatgatg gtcaatgcca 600
ctaaccagat gggaagcagt ttctcggatg aactttatgt ggacgtgact tacatagttc 660
agccagaccc tcctttggag ctggctgtgg aagtaaaaca gccagaagac agaaaaccct 720
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gcatctttcc gccagttcct gggccaaaaa taaaaggatt tgatgctcat ctgttggaga 1140
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ccttggatta tgtggagatt cacaaggtca acaaagatgg tgcattatca ttgctaccaa 186 0

aacagagaga gaacagcggc aagcccaaga agcccgggac tcctgagaac aataaggagt 1920
atgccaaggt gtccggggtc atggataaca acatcctggt gttggtgcca gatccacatg 1980
ctaaaaacgt ggcttgcttt gaagaatcag ccaaagaggc cccaccatca cttgaacaga 2040
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gctttcatga tttggcatgg gacagacgga aatgaaattg tcaaaattgt t taccataga 2520
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ttgctgatat gcaagtaaga aat 2723

<210> 97
<211> 365
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(365)
<223> 3' terminal sequence. interleukin 2
receptor, beta (IL2RB) gene.

<400> 97
gtacagttac cttttattta tagcgaaaat gggtttttc atttacagag taacaaagat 60
ttttctttaa ataaatgtat ttcaacgaaa atgaactgac ttaaagaaaa aatattaagg 120
aaataatcac aaagatggta cacacggatc attaaaagat acggatgtat aggatacata 180
tgtcacaaat gattaaggac ttaaaaaatg taaccctccc aagaagtggg gagcctccca 240
aagtggggga agggcaaata caatttccnt ttgggggggg atagggngac ccccttgca 300
gagaggggtt aggtggggtt tccccccggn acacacaggc aagggtttgg gngccccttg 360
tgggg 365

<210> 98
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(366)
<223> 5' terminal sequence. interleukin 2
receptor, beta (IL2RB) gene.

<400> 98
nattcggcac taggggcac ctgaccacac gcccccacag gctctgacca gcagcctatg 60
agggggtttg gcaccaagct ctgtccaatc aggtaggctg ggctgaacta gccaatcaga 120
tcaactctgt cttgggcgtt tgaactcagg gagggaggcc cttgggagca ggtgcttgtg 180
gacaaggctc cacaagcgtt gagccttgga aaggtagaca agcgttg agc cactaagcag 240
aggaccttgg gttcccaata caaaaatacc tactgctgag aggggntgct gaccattttg 300

gtcaaggatt tcngtttgcc ttatatccca aataaaantcc ctttttttn aggttttntt 360
agtntt 366

<210> 99
<211> 4034
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(4034)
<223> interleukin 2 receptor, beta (IL2RB) gene.

<400> 99
gcagccagag ctcagcaggg ccctggagag atggccacgg tcccagcacc ggggagg act 60
ggagagcgcg cgctgccacc gccccatgtc tcagccaggg cttccttcct cggctccacc 120
ctgtggatgt aatggcggcc cctgctctgt cctggcgtct gcccctcctc atcctcctcc 180
tgcccctggc tacctcttgg gcatctgcag cggtgaatgg cacttcccag ttcacatgct 240
tctacaactc gagagccaac atctcctgtg tctgga gcca agatggggct ctgcaggaca 300
cttcctgcca agtccatgcc tggccggaca gacggcggtg gaaccaaacc tgtgagctgc 360
tccccgtgag tcaagcatcc tgggcctgca acctgatcct cggagcccca gattctcaga 420
aactgaccac agttgacatc gtcaccctga gggtgctgtg ccgtgagggg gtgcgatgga 480
gggtgatggc catccaggac ttcaagccct ttgagaacct tcgcctgatg gcccccatct 540
ccctccaagt tgtccacgtg gagacccaca gatgcaacat aagctgggaa atctcccaag 600
cctcccacta ctttgaaaga cacctggagt tcgaggcccg gacgctgtcc ccaggccaca 660
cctgggagga ggccccctg ctgactctca agcagaagca ggaatggatc tgcctg gaga 720
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tcagtccact gctgaggaca ctcagtgtcc agttgcagct ggacttctcc acccggatgg 1920
ccccacccа gtcctgcaca cttggtccat ccatttccaa acctccactg ctgctcccgg 1980
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cctgctgcat cttcccacag tggcttcaca gacccacaag agaagctgat ggggagtaaa 2760
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gacacagtgc ccaacacccc gtcgtatacc ctggatgaac gaattaatta cctggcacca 3000
cctcgtctgg gctccctgcg cctgacattc acacagagag gcagagtccc gtgcccatta 3060
ggtctggcat gccccctcct gcaaggggct caacccccct a ccccgacccc tccacgtatc 3120
tttcctaggc agatcacgtt gcaatggctc aaacaacatt ccaccccagc aggacagtga 3180
ccccagtccc agctaactct gacctgggag ccctcaggca cctgcactta caggccttgc 3240
tcacagctga ttgggcacct gaccacacgc ccccacaggc tctgaccagc agcctatgag 3300
ggggtttggc acc aagctct gtccaatcag gtaggctggg cctgaactag ccaatcagat 3360
caactctgtc ttgggcgttt gaactcaggg agggaggccc ttgggagcag gtgcttgtgg 3420
acaaggctcc acaagcgttg agccttggaa aggtagacaa gcgttgagcc actaagcaga 3480
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tgggtctatg ccttgaaaaa agctgaatta ttggacagtc tcacctcctg ccatagggtc 3660
ctgaatgttt cagaccacaa ggggctccac acctttgctg tgtgttctgg ggcaacctac 3720
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cactttggga ggctcccact tcttgggagg gttacatttt ttaagtctta atcatttgtg 3840
acatatgtat ctatacatcc gtatctttta atgatccgtg tgtaccatct ttgtgattat 3900
ttccttaata ttttttcttt aagtcagttc attttcgttg aaatacattt ataaagaaaa 3960
atctttgtta ctctgtaaat gaaaaaaccc attttcgcta taaataaaag gtaactgtac 4020
aaaataagta caat 4034

<210> 100
<211> 444
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(444)
<223> 3' terminal sequence. gata -binding protein 3
(GATA3) gene.

<400> 100
tttctatttt tttatttttct tttaatgcat caaacaactg tggccagtga aaggaaacaa 60
aactggcagt ttgtccattt gaatatcaga cctagtttct tcttaatttc cacacta ttt 120
ctcccatatt ccttaaactt cttggcatcc ttcatgcctt acagctaccc agatgcaata 180
aagtcattgt acagtatttc ttacaatata agttatatgg caatgttcag gcatttttt 240
ttttcacagg cactaggagg accctgttta aatgggggat atgaggtcag gaatgggctt 300
attcacagga tgggggtcc cggattcagg tgggt tgggg ancacaggac accacaggtg 360
aggctccctt tgccaaaggt ggggccaaac ataattttgg cttttctggc ccttcaaaaa 420
catatttccn tcgcgttttg gggg 444

<210> 101
<211> 396
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>

<221> misc_feature
<222> (1)..(396)
<223> 5' terminal sequence. gata -binding protein 3
(GATA3) gene.

<400> 101
gcaatgggga ccctgtctgc aatgcctgtg gntctactac aagcttcaca atattaacag 60
acccctgact atgaagaagg aaggcatcc a gaccagaaac cgaaaaatgt ctagcaaatc 120
caaaaagtgc aaaaagtgca tgactcactg gaggacttcc ccaagaacag ctcgtttaac 180
ccggccgccc tctccagaca catgtcctcc ctgagccaca tctcgccctt cagccactcc 240
agccacatgc tgaccacggc ccacgccgat ggcacccgcc atccagcctg tcctttggga 300
ccacaccacc cctccagctg ggtcaccgcc ntgggtttag agccttgttn gatggttcac 360
agggggcccc cagcgagagt tncctgnagt tccttt 396

<210> 102
<211> 416
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(416)
<223> 5' terminal sequence. placental growth
factor, vascular endothelial growth factor -related
protein (PGF) gene.

<400> 102
attcggcact aggggagacc caagggcagg gggaagagga ggagagagaa gcagagaccc 60
acagactgcc a cctgtgcgg cgatgctgtt ccccggagta acccaccct tggaggagag 120
agaccccgca cccggctcgt gtatttatta ccgtcacact cttcagtgac tcctgctggt 180
acctgccctc tatttattag ccaactgttt ccctgctgaa tgcctcgctc ccttcaagac 240
gaggggcagg gaaggacagg accctcagga attcagtgcc ttcaacaacg tga gagaaag 300
agagaagcca gccacagacc cctggggagc tttccgcttt tgaaagaagc aagacaagtt 360
ggccttgttg aggggcaagg ttagggccca ggaggccctn gggaagtttt tcaggg 416

<210> 103
<211> 1645
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Se quence:primer

<220>
<221> misc_feature
<222> (1)..(1645)
<223> placental growth factor, vascular
endothelial growth factor -related protein (PGF)
gene.

<400> 103
gggattcggg ccgcccagct acgggaggac ctggagtggc actgggcgcc cgacggacca 60
tccccgggac ccgcctgccc ctcggcgccc cgccccgccg ggccgctccc cgtcgggttc 120
cccagccaca gccttaccta cgggctcctg actccgcaag gcttccagaa gatgctcgaa 180
ccaccggccg gggcctcggg gcagcagtga gggaggcgtc cagcccccca ctcagctctt 240
ctcctcctgt gccaggggct ccccgggggа tgagcatggt ggttttccct cggagcccc 300

tggctcggga cgtctgagaa gatgccggtc atgaggctgt tcccttgctt cctgcagctc 360
ctggccgggc tggcgctgcc tgctgtgccc ccccagcagt gggccttgtc tgctgggaac 420
ggctcgtcag aggtggaagt ggtacccttc caggaagtgt ggggccgcag ctactgccgg 480
gcgctggaga ggctggtgga cgtcgtgtc c gagtacccca gcgaggtgga gcacatgttc 540
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tgtgtgccgg tggagacggc caatgtcacc atgcagctcc taaagatccg ttctggggac 660
cggccctcct acgtggagct gacgttctct cagcacgttc gctgcgaatg ccggcctctg 720
cgggagaaga tgaagccgga aaggtgcggc gatgctgttc cccggaggta acccaccccc 780
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acacgtggcc tcgtgagggg caagctaggc cccagaggcc ctggaggtct ccaggggcct 1080
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gggaggagcc tgtgcgtccc agctgaaggc agtggcaggg gagcaggttc cccaagggcc 1560
ctggcacccc cacaagctgt ccctgcaggg ccatctga ct gccaagccag attctcttga 1620
ataaagtatt ctagtgtgga aacgc 1645

<210> 104
<211> 309
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(309)
<223> 5' terminal sequence. ubiquitin protein
ligase e3a (human papilloma virus e6 -associated
protein, angelman syndrome) (UBE3A) gene.

<400> 104
ttcggcanag gggaaatgaa gcctgcacga atgagttttg tgcttcctgt ccaacttttc 60
ttcgtatgga taataatgca gc agctatta aagccctcga gctttataag antagggcaa 120
aactctgtga tcctcatccc tccaagaaag gagcaagctc agcttacctt gagaactcga 180
aaggtgcccc caacaactcc tgctctgaga taaaaatgaa caaggaaagg gcgctaggaa 240
ttggatttta aagatgtgac ttactttaac aggaaggagg aagggtatta tggaaaattt 300
tctttggac 309

<210> 105
<211> 2628
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(2628)
<223> ubiquitin protein ligase e3a (human

papilloma virus e6 -associated protein, angelman syndrome) (UBE3A) gene.

<400> 105
atggagaagc tgcaccagtg ttattggaaa tcaggagaac ctcagtctga cgacattgaa 60
gctagccgaa tgaagcgagc agctgcaaag catctaatag aacgctacta ccaccagtta 120
actgagggct gtggaaatga agcctgcacg aatgagtttt gtgcttcctg tccaactttt 180
cttcgtatgg ataataatgc agcagctatt aaagccctcg agctttataa gattaatgca 240
aaactctgtg atcctcatcc ctccaagaaa ggagcaagct cagcttacct tgagaactcg 300
aaaggtgccc ccaacaactc ctgctctgag ataaaaatga aca agaaagg cgctagaatt 360
gattttaaag atgtgactta cttaacagaa gagaaggtat atgaaattct tgaattatgt 420
agagaaagag aggattattc ccctttaatc cgtgttattg gaagagtttt ttctagtgct 480
gaggcattgg tacagagctt ccggaaagtt aaacaacaca ccaaggaaga actgaaatct 540
cttcaagcaa aagatgaaga c aaagatgaa gatgaaaagg aaaaagctgc atgttctgct 600
gctgctatgg aagaagactc agaagcatct tcctcaagga taggtgatag ctcacaggga 660
gacaacaatt tgcaaaaatt aggccctgat gatgtgtctg tggatattga tgccattaga 720
agggtctaca ccagattgct ctctaatgaa aaaattgaaa ctgcctttct caatgcactt 780
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cctaattatc tgaatttgtt cattatcgga atggagaata gaaatctcca cagtcctgaa 900
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gagacatttc agcaacttat tacttataaa gtcataagca atgaatttaa cagtcgaaat 1080
ctagtgaatg atgatgatgc cattgttgct gcttcgaagt gcttgaaaat ggtttactat 1140
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tttaatccat cttcttttga aactgagggt cagtttactc tgattggcat agtactgggt 1860
ctggctattt acaataactg tatactggat gtacattttc ccatggttgt ctacaggaag 1920
ctaatgggga aaaaaggaac ttttcgtgac ttgggagact ctcacccagt tctatatcag 1980
agtttaaaag atttattgga gtatgaaggg aatgtggaag atgacatgat gatcactttc 2040
cagatatcac agacagatct ttttggtaac ccaatgatgt atg atctaaa ggaaaatggt 2100
gataaaattc caattacaaa tgaaaacagg aaggaatttg tcaatcttta ttctgactac 2160
attctcaata aatcagtaga aaaacagttc aaggcttttc ggagaggttt tcatatggtg 2220
accaatgaat ctcccttaaa gtacttattc agaccagaag aaattgaatt gcttatatgt 2280
ggaagccgga atctagat tt ccaagcacta gaagaaacta cagaatatga cggtggctat 2340
accagggact ctgttctgat tagggagttc tgggaaatcg ttcattcatt tacagatgaa 2400
cagaaaagac tcttcttgca gtttacaacg ggcacagaca gagcacctgt gggaggacta 2460
ggaaaattaa agatgattat agccaaaaat ggcccagaca cagaaaggtt acctaca tct 2520
catacttgct ttaatgtgct tttacttccg gaatactcaa gcaaagaaaa acttaaagag 2580
agattgttga aggccatcac gtatgccaaa ggatttggca tgctgtaa 2628

<210> 106
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence :primer

<220>
<221> misc_feature
<222> (1)..(363)

<223> 3' terminal sequence. oncogene tc21 (TC21)
gene.

<400> 106
aattttaatt ctagcacctg aagctataca agggtatgct ctataaactt catgggactg 60
tcgtacacac ttgataaagt gacaactgtg caataccact tagcatctca aaatcag gaa 120
catactattg aattgcttaa acacaatcca caganttaaa aacaaaatca ggatgccatc 180
cacagttata ctaattatcc attaaaaggc ttacacttaa tacttgaant aacaatcaat 240
atctagncgg ggnatactgg aaagtggatt tcagnggtct catcctgttg gtactctatt 300
gggggngggt ttcttgaggt aggttatggt ggact gggnc caaggntggg gggtaccacc 360
cag 363

<210> 107
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(408)
<223> 5' terminal sequence. oncogene tc21 (TC21)
gene.

<400> 107
gaattgaatc tacaaaagtg aaccatctca gacctttact gatactacaa cttttgtttt 60
ctgatggcca aaataccaaa tgcctgttgt atttatggat taaaaactgc ttataaaacc 120
ctgtgttact actcctactc ttggagatga taatattc ta tgtggtcaaa tatttggact 180
catttaggac ttagatattt cagtgtactt gatttttaa tttaactctt tttcacagcc 240
acgctaaggg taaaaaggaa taatttcctt ctgtcttcct tttcaagtat ttctgggtaa 300
gggattcaaa aaactaaaac tgtttttgtt tgtaatataa aatatgggat tgatctttcc 360
ggggtcagag atgatt aatg tttttgctat atacttttat acatgntt 408

<210> 108
<211> 612
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(612)
<223> oncogene tc21 (TC21) gene.

<400> 108
atggccgcgg cggctggcgg acggctccgg caggagaagt accggctcgt ggtggtcggc 60
gggggcggcg tgggcaagtc ggcgctcacc atccagttca tccagtccta ttttgtaacg 120
gattatgatc caaccattga agattcttac acaaagcagt gtgtgataga tgacagagca 180
gcccggctag atattttgga tacagcagga caagaagagt t tggagccat gagagaacag 240
tatatgagga ctggcgaagg cttcctgttg gtcttttcag tcacagatag aggcagtttt 300
gaagaaatct ataagtttca aagacagatt ctcagagtaa aggatcgtga tgagttccca 360
atgattttaa ttggtaataa agcagatctg gatcatcaaa gacaggtaac acaggaagaa 420
ggacaacagt tagcacggca gcttaaggta acatacatgg aggcatcagc aaagattagg 480
atgaatgtag atcaagcttt ccatgaactt gtccgggtta tcaggaaatt tcaagagcag 540
gaatgtcctc cttcaccaga accaacacgg aaagaaaaag acaagaaagg ctgccattgt 600

gtcatttttct ag 6 12

<210> 109
<211> 592
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(592)
<223> 5' terminal sequence. tyrosine kinase with immunoglobulin and epidermal growth facto r homology domains (TIE) gene.

<400> 109
ngtcggagag aacctagcct ccaagattgc agacttcggc ctttctcggg gagaggaggt 60
ttatgtgaag aagacgatgg ggcgtctccc tgtgcgctgg atggccattg agtccctgaa 120
ctacagtgtc tataccacca agagtgatgt ctggtccttt ggagtccttc tttgggagat 1 80
agtgagcctt ggaggtacac cctactgtgg catgacctgt gccgagctct atgaaaagct 240
gccccagggc taccgcatgg agcagcctcg aaactgtgac gatgaagtgt acgagctgat 300
gcgttcagtg ctggcgggac cgtccctatg agcgaccccc ctttgcccag attgcgctaa 360
cagctaggcc gcatgctggg aagccaggga aggcctatgt gaacatgttc gctgtttgag 420
aacttcaatt aacgcgggca ttgatgccac agctgaggag gnctgagctg ccatccagcc 480
agaactnggt ctgttggccg gagcaaattt ggtgtctaaa ctgtgaccag ttnaacctta 540
aagctttgat ttaagttgct taaggatttt tttaattaag ggagaaaaat tt 592

<210> 110
<211> 3845
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(3845)
<223> tyrosine kinase with immunoglobulin and epidermal growth factor homology domains (TIE) gene.

<400> 110
cgctcgtcct ggctggcctg ggtcggcctc tggagtatgg tctggcgggt gccccctttc 60
ttgctcccca tcctcttctt ggcttctcat gtgggcgcgg cggtggacct gacgctgctg 120
gccaacctgc ggctcacgga cccccagcgc ttcttcctga cttgcgtgtc tggggaggcc 180
ggggcgggga ggggctcgga cgcctggggc cc gcccctgc tgctggagaa ggacgaccgt 240
atcgtgcgca ccccgcccgg gccacccctg cgcctggcgc gcaacggttc gcaccaggtc 300
acgcttcgcg gcttctccaa gccctcggac ctcgtgggcg tcttctcctg cgtgggcggt 360
gctggggcgc ggcgcacgcg cgtcatctac gtgcacaaca gccctggagc ccacctgctt 420
ccagacaagg tcacacacac tgtgaacaaa ggtgacaccg ctgtactttc tgcacgtgtg 480
cacaaggaga agcagacaga cgtgatctgg aagagcaacg gatcctactt ctacaccctg 540
gactggcatg aagcccagga tgggcggttc ctgctgcagc tcccaaatgt gcagccacca 600
tcgagcggca tctacagtgc cacttacctg gaagccagcc ccctgggcag cg ccttcttt 660
cggctcatcg tgcggggttg tggggctggg cgctgggggc caggctgtac caaggagtgc 720
ccaggttgcc tacatggagg tgtctgccac gaccatgacg gcgaatgtgt atgccccct 780
ggcttcactg gcacccgctg tgaacaggcc tgcagagagg gccgttttgg gcagagctgc 840

caggagcagt gcccaggcat atcaggctgc cggggcctca ccttctgcct cccagacccc 900
tatggctgct cttgtggatc tggctggaga ggaagccagt gccaagaagc ttgtgcccct 960
ggtcattttg gggctgattg ccgactccag tgccagtgtc agaatggtgg cacttgtgac 1020
cggttcagtg gttgtgtctg cccctctggg tggcatggag tgcactgtga gaagtcagac 1080
cggatccccc agatcctcaa catggcctca gaactggagt tcaacttaga gacgatgccc 1140
cggatcaact gtgcagctgc agggaacccc ttccccgtgc ggggcagcat agagctacgc 1200
aagccagacg gcactgtgct cctgtccacc aaggccattg tggagccaga gaagaccaca 1260
gctgagttcg aggtgccccg cttggttctt gcggacagtg ggttct ggga gtgccgtgtg 1320
tccacatctg gcggccaaga cagccggcgc ttcaaggtca atgtgaaagt gccccccgtg 1380
ccctggctg cacctcggct cctgaccaag cagagccgcc agcttgtggt ctccccgctg 1440
gtctcgttct ctggggatgg acccatctcc actgtccgcc tgcactaccg gccccaggac 1500
agtaccatgg actggtcgac cattgtggtg gaccccagtg agaacgtgac gttaatgaac 1560
ctgaggccaa agacaggata cagtgttcgt gtgcagctga gccggccagg ggaaggagga 1620
gaggggcct gggggcctcc caccctcatg accacagact gtcctgagcc tttgttgcag 1680
ccgtggttgg agggctggca tgtggaaggc actgaccggc tgcgagtgag ctggtccttg 1740
cccttggtgc ccgggccact ggtgggcgac ggtttcctgc tgcgcctgtg ggacgggaca 1800
cgggggcagg agcggcggga gaacgtctca tccccccagg cccgcactgc cctcctgacg 1860
ggactcacgc ctggcaccca ctaccagctg gatgtgcagc tctaccactg caccctcctg 1920
ggcccggcct cgccccctgc acacgtgctt ctgc ccccca gtgggcctcc agccccccga 1980
cacctccacg cccaggccct ctcagactcc gagatccagc tgacatggaa gcacccggag 2040
gctctgcctg ggccaatatc caagtacgtt gtggaggtgc aggtggctgg gggtgcagga 2100
gacccactgt ggatagacgt ggacaggcct gaggagacaa gcaccatcat ccgtggcctc 2160
aacgccagca cgcgctacct cttccgcatg cgggccagca ttcaggggct cggggactgg 2220
agcaacacag tagaagagtc caccctgggc aacgggctgc aggctgaggg cccagtccaa 2280
gagagccggg cagctgaaga gggcctggat cagcagctga tcctggcggt ggtgggctcc 2340
gtgtctgcca cctgcctcac catcctggcc gccctttaa ccctggtg tg catccgcaga 2400
agctgcctgc atcggagacg caccttcacc taccagtcag gctcgggcga ggagaccatc 2460
ctgcagttca gctcagggac cttgacactt acccggcggc caaaactgca gcccgagccc 2520
ctgagctacc cagtgctaga gtgggaggac atcacctttg aggacctcat cggggagggg 2580
aacttcggcc aggtcatccg gg ccatgatc aagaaggacg ggctgaagat gaacgcagcc 2640
atcaaaatgc tgaaagagta tgcctctgaa aatgaccatc gtgactttgc gggagaactg 2700
gaagttctgt gcaaattggg gcatcacccc aacatcatca acctcctggg ggcctgtaag 2760
aaccgaggtt acttgtatat cgctattgaa tatgcccct acgggaacct gctagatttt 2 820
ctgcggaaaa gccgggtcct agagactgac ccagcttttg ctcgagagca tgggacagcc 2880
tctaccctta gctcccggca gctgctgcgt ttcgccagtg atgcggccaa tggcatgcag 2940
tacctgagtg agaagcagtt catccacagg gacctggctg cccggaatgt gctggtcgga 3000
gagaacctag cctccaagat tgcagacttc ggcctt tctc ggggagagga ggtttatgtg 3060
aagaagacga tggggcgtct ccctgtgcgc tggatggcca ttgagtccct gaactacagt 3120
gtctatacca ccaagagtga tgtctggtcc tttggagtcc ttctttggga gatagtgagc 3180
cttggaggta caccctactg tggcatgacc tgtgccgagc tctatgaaaa gctgccccag 3240
ggctaccgca tggagcagcc tcgaaactgt gacgatgaag tgtacgagct gatgcgtcag 3300
tgctggcggg accgtcccta tgagcgaccc ccctttgccc agattgcgct acagctaggc 3360
cgcatgctgg aagccaggaa ggcctatgtg aacatgtcgc tgtttgagaa cttcacttac 3420
gcgggcattg atgccacagc tgaggaggcc tgagctgcca tccagccaga acgtggctct 3480
gctggccgga gcaaactctg ctgtctaacc tgtgaccagt ctgaccctta cagcctctga 3540
cttaagctgc ctcaaggaat ttttttaact taagggagaa aaaaagggat ctggggatgg 3600
ggtgggctta ggggaactgg gttcccatgc tttgtaggtg tctcatagct atcctgggca 3660
tccttctttc tagttcagct gccc cacagg tgtgtttccc atcccactgc tccccaaca 3720
caaaccccca ctccagctcc ttcgcttaag ccagcactca caccactaac atgccctgtt 3780
cagctactcc cactcccggc ctgtcattca gaaaaaaata aatgttctaa taagctccaa 3840
aaaaa 384 5

<210> 111
<211> 202
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(202)
<223> 3' terminal sequence. autocrine motility
factor receptor (AMFR) gene.

<400> 111
aaagcccttc aaggtttact cncccanctt gcaaggccca cancttgttc aaggaccaaa 60
cccacaggct ttagcactgc ctaatttact tcaccaatga atgaaaacca taaaccaaag 120
cttgctgcct aaccactccc cagggccaga cgggacaagg aaatgctgag aggggagggg 180
acccatgggg canantnatg ag 202

<210> 112
<211> 450
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(450)
<223> 5' terminal sequence. autocrine motility
factor receptor (AMFR) gen e.

<400> 112
attcaagtac cttttcctac acagcggtca gatagcatca gacctgcatt gaacagtcct 60
gtggaaaggc caagcagtga ccaggaagag ggagaaactt ctgctcagac cgagcgtgtg 120
ccactggacc tcagtcctcg cctggaggag acgctggact tcggcgaggt ggaagtggag 180
cccagtgagg tggaagactt cgaggctcgt gggagcgctt tctccaagtc tgctgatgag 240
agacagcgca tgtggtngca gcgtaaggac gaactcctcc agcaagctcg caaacgtttt 300
cttgaacaaa agttctgaag atgatgccgg ccttcagaga gctttcctnc ccttcggaaa 360
ggtgccgttc cttttgaacc ccgtgaaccc ctgncgttcg aaaggattgc ttggcttgcc 420
cgccgcggga aacggaggct ttcagaagca 450

<210> 113
<211> 1810
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1810)
<223> autocrine motility factor receptor (AMFR)
gene.

<400> 113
gggggaagg ccaagcagtg accaggaaga gggagaaact tctgctcaga ccgagcgtgt 60
gccactggac ctcagtcctc gcctggagga gacgctggac ttcggcgagg tggaagtgga 120
gcccagtgag gtggaagact tcgaggctcg tgggagccgc ttctccaagt ctgctgatga 180
gagacagcgc atgctggtcg cagcgtaagg acgaactcct ccagcaagct cgcaaacgtt 240
tcttgaacaa aagttctgaa gatgatgcgg cctcagagag cttcctcccc tcggaaggtg 300
cgtcctctga ccccgtgacc ctgcgtcgaa ggatgctggc tgccgcgcgg aacggaggct 360
tcagaagcag cagacctcct agcgctccct tgccttcctc agctgcct cc tgcgccctgt 420
gcccgactga ctggaggagg cctgtcccaa ttctgccgct ccatggaaaa gcgggcttga 480

ctgcattgcc gctgtataaa gcatgtggtc ttatagtgtt tggacagctg ataaatttaa 540
tccttctttg taatactttc tatgtgacat ttctcttccc cttagaaaca ctgcaaattt 600
taactgtagg tatgatcttt tctggtgttg actggactgc ttggggtggg ggacgatcag 660
gaggaagtga gccagtcgcc tgcctgcagc aggcagcttc tactcctgcc tcatgcatac 720
gtcccacaaa tgcaggtgtc ctgagcacca cacccagtgg gaagagtgtg ggggaggcgc 780
acagtgtgag cccgccccca cgtcgtgggg taacatctgt tatcaaactg ctgtcgttgt 840
tgtggaagca tgtagactgt gccagagcca gacccacggg ctcatgcacc cctgagcagc 900
agggcatctt ggaaaaggaa ctcttggttc gatacctgga gcagaggagg ggaaagtcca 960
gggctatagg gtgtgatgaa gtcacccctt tctgtcccac tacatctggg actgactttc 1020
cgagcctcca gtccaaagcc ggcttgattt ccgtgaactc tggtg ctcct gcatctcatg 1080
agtgtgcccc atgggtcccc tcccctctca gcatttcctt gtcccgtctg gacctgggga 1140
gtggttaggc agcaagcttt ggtttatggt tttcattcat tggtgaagta aattaggcag 1200
tgctaaagcc tgtgggtttg gtccttgaac aagatgtggg ccttgcaaga tgggagagta 1260
aaccttgaag ggctttatta aagaaataaa aaagaacttt tgtatctttt atcctgggag 1320
cactgcgttt tcctagctgt gttattcctg gtttaattca gcagagaagg taaggtgtga 1380
acctacctgc cttggagagg cccaggtccc aaatctcttc aaattcttca catgtttaac 1440
tttaaggatt tgaaccatga agtcataggt tacagacctc agttttatgc cccattgga t 1500
tactttttt ttttttttt ttttttact ctttgaaagc tttgttttgt ggtagtcgct 1560
tttgggaaga atccagtatt atctacaatt attggcaaag tttaaatgta ttttacataa 1620
cggaaagttt ttagaatgtt gaaaagtaat tgaaaaaggt gataggtaaa tttttaggca 1680
aagataattt atttcaataa atctttcaaa agc cttacct tgaaatgctg ttagtaaatt 1740
tctgtgcatt ttttttttt aatttgtttt gctgagagca tagctatttg tttttattgt 1800
aaacccgccc 1810

<210> 114
<211> 248
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(248)
<223> 3' terminal sequence. homo sapiens mrna;
cdna dkfzp434c136 (from clone dkfzp434c136) (EST
R81127) gene.

<400> 114
gaaattccaa aatcactcta gtttattcac ataatatagn atttgattcc attcttttgn 60
actgtnccen actttacaa tgtgtacaat gtttcaccat gtnccaatta atggttgagc 120
tttaaatgaa aatattctgg ancttccatt tatnggnatc aaccacaata gcaagacccc 180
cangaaatac ttgatctaaa ctgggagggt ccaacacaat ttttttttt aatgggnctt 240
gccacctt 248

<210> 115
<211> 415
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(415)
<223> 3' terminal sequence. b-cell cll/lymphoma 2
(BCL2) gene.

<400> 115
ttttttaaag cagctttcga aatatcaacc acagcattaa acattgaaca gagtacattc 60
caaagttaat acagataaat ggtatataat gcaataatgc cacagagtta ttccatcaat 120
gtttcanggc tgattctaaa ctggangaaa aaaaaaattn cctagtttat ttgctganga 180
tgtcacttct tttgttactt ctttatagtt ccccaccatt gattttnttt ttaatgcccc 240
ggggtgtaca ggataacccc catattccac accggggnac ttttttttttg tcagggtttt 300
caaataaanc caaactacag tgacaggata atgttttaca ggtaattccn tgggccgggg 360
ggtcaattat ncctggacac ctcacttcaa ggcntccttt gggggtttgg gggcc 415

<210> 116
<211> 468
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(468)
<223> 5' terminal sequence. b-cell cll/lymphoma 2
(BCL2) gene.

<400> 116
aattgtgcca gaaaagcatt ttagcaattt atacaatatc atccagtacc ttaagccctg 60
attgtgtata ttcatatatt ttggatacgc acccccaac tcccaatact ggctctgtct 120
gagtaagaaa cagaatcctc tggaacttga ggaagtgaac atttcggtga cttccgcatc 180
aggaaggcta gagttaccca gagcatcagg ccgccacaag tgcctgcttt t aggagaccg 240
aagtccgcag aacctgcctn tgtcccagct tggaggcctg gtcctgggaa ctgagccggg 300
gccctcactn gcctcctcca gggatgatca acaggngcag tgtggtntcc gaatgtctgg 360
aagcttgatg ggagctcaga atttccactg ttcaagaaag agncagtaga ggggtgtngc 420
tgggnctgtt cacctggggg ccctncaggt agngcccntt tttcacgt 468

<210> 117
<211> 6030
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(6030)
<223> b-cell cll/lymphoma 2 (BCL2) gene.

<400> 117
gttggccccc gttacttttc ctctgggaaa tatggcgcac gctgggagaa cagggtacga 60
taaccgggag atagtgatga agtacatcca ttataagctg tcgcagaggg gctacgagtg 120
ggatgcggga gatgtgggcg ccgcgccccc gggggccgcc cccgcgccgg gcatcttctc 180
ctcgcagccc gggcacacgc cccatacagc cgcatcccgg gacccg gtcg ccaggacctc 240
gccgctgcag accccggctg cccccggcgc cgccgcgggg cctgcgctca gcccggtgcc 300
acctgtggtc cacctgaccc tccgccaggc cggcgacgac ttctcccgcc gctaccgccg 360
cgacttcgcc gagatgtcca ggcagctgca cctgacgccc ttcaccgcgc ggggacgctt 420
tgccacggtg gtggaggagc tctt cagga cggggtgaac tgggggagga ttgtggcctt 480
ctttgagttc ggtggggtca tgtgtgtgga gagcgtcaac cgggagatgt cgcccctggt 540
ggacaacatc gccctgtgga tgactgagta cctgaaccgg cacctgcaca cctggatcca 600
ggataacgga ggctgggatg cctttgtgga actgtacggc cccagcatgc ggcctctgtt 660

tgatttctcc tggctgtctc tgaagactct gctcagtttg gccctggtgg gagcttgcat 720
caccctgggt gcctatctgg gccacaagtg aagtcaacat gcctgcccca aacaaatatg 780
caaaaggttc actaaagcag tagaaataat atgcattgtc agtgatgttc catgaaacaa 840
agctgcaggc tgtttaagaa aaaataacac acatataaac atca cacaca cagacagaca 900
cacacacaca caacaattaa cagtcttcag gcaaaacgtc gaatcagcta tttactgcca 960
aagggaaata tcatttattt tttacattat taagaaaaaa agatttattt atttaagaca 1020
gtcccatcaa aactcctgtc tttggaaatc cgaccactaa ttgccaagca ccgcttcgtg 1080
tggctccacc tggatgttct gtgcctgtaa acatagattc gctttccatg ttgttggccg 1140
gatcaccatc tgaagagcag acggatggaa aaaggacctg atcattgggg aagctggctt 1200
tctggctgct ggaggctggg gagaaggtgt tcattcactt gcatttcttt gccctggggg 1260
ctgtgatatt aacagaggga gggttcctgt gggggggaagt ccatgcctcc ctggcctgaa 1320
gaagagactc tttgcatatg actcacatga tgcatacctg gtgggaggaa aagagttggg 1380
aacttcagat ggacctagta cccactgaga tttccacgcc gaaggacagc gatgggaaaa 1440
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<210> 118
<211> 343
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(343)
<223> 5' terminal sequence. v-erb-b2 avian
erythroblastic leukemia viral oncogene homolog 2
(neuro/glioblastoma derived oncogene homolog)
(ERBB2) gene.

<400> 118
caaggggctg caaactnncc cacacatgac cccagccctc tacagcggta cagtgaggac 60
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cagcctgaat atgtgaacca gccagatgtt cggcccccagc cccct tcgcc ccgagaggcc 180
ctctgcctgc tgcccgacct gctggtgcca ctctggaaag gcccaagact ctctccccag 240
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<210> 119
<211> 4530
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(4530)
<223> v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 2 (neuro/glioblastoma derived oncogene homolog) (ERBB2) gene.

<400> 119
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aactatgccc tggccgtgct agacaatgga gacccgctga acaataccac ccctgtcaca 540
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<210> 120
<211> 319
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(319)
<223> 5' terminal sequence. mouse double minute 2,
human homolog of; p53-binding protein (MDM2) gene.

<400> 120
nacttatttc ccctagttga cctgtctata agagaattat atatttctaa ctatataacc 60
ctaggaattt agacaacctg aaatttattc acatatatca aagtgagaaa atgcctcaat 120
tcacatagat ttcttctctt tagtataatt gacctacttt ggtagtggga a tagtgaata 180
cttactataa tttgacttga atatgtaggc tcatccttta caccaactcc taattttaaa 240
taatttctac tctgtcttaa atgaggaggt acttgggntt ttttttttct taaatatggt 300
atatggacat ttaaatggt 319

<210> 121
<211> 2372
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature

<222> (1)..(2372)
<223> mouse double minute 2, human homolog of;
p53-binding protein (MDM2) gene.

<400> 121
gcaccgcgcg agcttggctg cttct ggggc ctgtgtggcc ctgtgtgtcg gaaagatgga 60
gcaagaagcc gagcccgagg ggcggccgcg acccctctga ccgagatcct gctgctttcg 120
cagccaggag caccgtccct ccccggatta gtgcgtacga gcgcccagtg ccctggcccg 180
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aaggaaactg gggagtcttg agggaccccc gactccaagc gcgaaaaccc cggatggtga 300
ggagcaggca aatgtgcaat accaacatgt ctgtacctac tgatggtgct gtaaccacct 360
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cacatatatc aaagtgagaa aatgcctcaa ttcacataga tttcttctct ttagtataat 1920
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caaagtgctg ggattacagg catgagccac cg 2372

<210> 122
<211> 343
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(343)
<223> 3' terminal sequence. gata-binding protein 3
(GATA3) gene.

<400> 122
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gacagggcga ngaggcagcc nggccgataa ncaggacgtg gccnntcggn cagggttcgc 120
tgacatgcac gctggtagct catacactgc taccctcagc acaggctgca ggaataggga 180
caagacagat gccgccggac tcttaggaag ctatttaata aatatcatcc aaanacaaaa 240
tgggaaaagg aaacaaggaa accctccggg gcacaaccac cttaggggcc aactggaatg 300
gtaattctag gttttatttc caacccaaaa nttgaggaga gga 343

<210> 123
<211> 258
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(258)
<223> 3' terminal sequence. src homology 3
domain-containing protein hip-55 (HIP-55) gene.

<400> 123
cgagtgagnt atgttggagg aacatgttgt gtctgccgtt tttgaatacc cagggtggga 60
gcttggccat ctgcatcccc acttcccata gcccaggcag agggac agag aaatggagtn 120
gggagcacag agcaggctcc aacaagacaa attccctgct gccaaaccac catgatccac 180
tctgactttg gncacaaact ctgctaaaaa caattctcta cgttcactgt tcccaagggg 240
cantttaaa cagtggtg 258

<210> 124
<211> 443
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(443)
<223> 5' terminal sequence. src homology 3
domain-containing protein hip-55 (HIP-55) gene.

<400> 124
gccagggctc agtgg gcaag ggctctgtgc cgtngncctg tacgactacc atgcagccga 60
cgacacagag atctcctttg accccgagaa cctcatcacg ggcatcgagg tgatcgacga 120
aggctggtgg cgtggctatg ggccggatca tntgttngca tgttccctgc caactacgtg 180
gagctcattg agtgaggctg agggcacatc ttgcccttcc cctctcagac atggcttc ct 240
tattgctgga agaggaggcc tggggagttg acattcagca ctcttccagg gaatagggac 300
ccccagttga ggattgaggc ntcagggttc cctccggntt gggcagattc agccttttca 360
ccccaaatgg cagcaattgg cntgggtgat ttcccacaaa tcnttcctgg cattcccccg 420
acctttccca gacagtttgg ttt 443

<210> 125
<211> 1331
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1331)
<223> src homology 3 domain -containing protein
hip-55 (HIP-55) gene.

<400> 125
atggcggcga acctgagccg gaacgggcca gcgctgcaag aggcctacgt gcgggtggtc 60
accgagaagt ccccgaccga ctgggctctc tttacctatg aaggcaacag caatgacatc 120
cgcgtggctg gcacagggga gggtggcctg gaggagatgg tggaggagct caacagcggg 180
aaggtgatgt acgccttctg cagagtgaag gaccccaact ctggactgcc caaatttgtc 240
ctcatcaact ggacaggcga gggcgtgaac gatgtgcgga agggagcctg tgccagccac 300
gtcagcacca tggccagctt cctgaagggg gcccatgtga ccatcaacgc acgggccgag 360
gaggatgtgg agcctgagtg catcatggag aaggtggcca aggcttcagg tgccaactac 42 0
agctttcaca aggagagtgg ccgcttccag gacgtgggac cccaggcccc agtgggctct 480
gtgtaccaga agaccaatgc cgtgtctgag attaaaaggg ttggtaaaga cagcttctgg 540
gccaaagcag agaaggagga ggagaaccgt cggctggagg aaaagcggcg ggccgaggag 600
gcacagcggc agctggagca ggagcgccgg gagcgtgagc tgcgtgaggc tgcacgccgg 660
gagcagcgct atcaggagca gggtggcgag gccagccccc agaggacgtg ggagcagcag 720
caagaagtgg tttcaaggaa ccgaaatgag caggagtctg ccgtgcaccc gagggagatt 780
ttcaagcaga aggagagggc catgtccacc acctccatct ccagtcctca gcctggcaag 840
ctgaggagcc ccttcctgca gaagcagctc acccaaccag agacccactt tggcagagag 900
ccagctgctg ccatctcaag gcccagggca gatctccctg ctgaggagcc ggcgcccagc 960
actcctccat gtctggtgca ggcagaagag gaggctgtgt atgaggaacc tccagagcag 1020
gagaccttct acgagcagcc cccactggtg cagcagcaag gtgccggctc tgagcacatt 1080
gaccaccaca ttcagggcca ggggctcagt gggcaagggc tctgtgcccg tgccctgtac 1140
gactaccagg cagccgacga cacagagatc tcctttgacc ccgagaacct catcacgggc 1200
atcgaggtga tcgacgaagg ctggtggcgt ggctatgggc cggatggcca ttttggcatg 1260
ttccctgcca actacgtgga gctcattgag tgag gctgag ggcggccgct agactagtct 1320
agagaaaaaa c 1331

<210> 126
<211> 430
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(430)
<223> 3' terminal sequence. cathepsin d (lysosomal
aspartyl protease) (CTSD) gene.

<400> 126
gtatttccat gtcagctggg gctctcagcc gcccaagggg aggacaacag aggtcagctg 60
cagaggaagg ctggcaccag ccccaatccc aaccccacct ccaggccaat acatgccct 120
gggactggct cagtcccagc accaccctgc aggctccaac aaggtgggtt ttgtcccctc 180
tcactccttc cagctcatcc tcaggcctct agcggcctca tcctcaacgg gcccgggaca 240
ctgaacaggt agggtgggca gagccagctg ggncccaagc tnggcaagag gggccctcag 300
gcagggcagg ttttncaagg gagggncccg gaggacggcc ttgggtnttg g ggtaagggc 360
ttaanccagt cngggctttg gtaagggccc ggnaagggat tccntgggna aattaaaggg 420
aanccccagg 430

<210> 127

<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Seque nce:primer

<220>
<221> misc_feature
<222> (1)..(339)
<223> 5' terminal sequence. cathepsin d (lysosomal
aspartyl protease) (CTSD) gene.

<400> 127
gtggatgagg tgcgcgactg cagaaggcca tcggggcgtn gccgctgatt cagggcgagt 60
acatgatccc ctgtgagaag gtgtccacc c tgcccgcgat cacactgaag ctgggaggca 120
aaggctacaa gctgtcccca gaggactaca cgctcaaggt gtcgcaggcc gggaagaccc 180
tctgcctgag cggcttcatg ggcatggaca tcccgccacc cagcggncac tctggatcct 240
ggggcgacgt cttcattcgg ccgttantac attgtgtttt gaccgtgaca acaacagggt 300
tgggtttcgc gaggcttgcc cgcttttagt ttcccaagg 339

<210> 128
<211> 1988
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(1988)
<223> cathepsin d (lysosomal as party1 protease)
(CTSD) gene.

<400> 128
ccatgcagcc ctccagcctt ctgccgctcg ccctctgcct gctggctgca cccgcctccg 60
cgctcgtcag gatcccgctg cacaagttca cgtccatccg ccggaccatg tcggaggttg 120
ggggctctgt ggaggacctg attgccaaag gccccgtctc aaagtactcc caggcggtgc 18 0
cagccgtgac cgaggggccc attcccgagg tgctcaagaa ctacatggac gcccagtact 240
acggggagat tggcatcggg acgccccccc agtgcttcac agtcgtcttc gacacgggct 300
cctccaacct gtgggtcccc tccatccact gcaaactgct ggacatcgct tgctggatcc 360
accacaagta caacagcgac aagtccagca cctacgttaa gaatggtacc tcgtttgaca 420
tccactatgg ctcgggcagc ctctccgggt acctgagcca ggacactgtg tcggtgccct 480
gccagtcagc gtcgtcagcc tctgccctgg gcggtgtcaa agtggagagg caggtctttg 540
gggaggccac caagcagcca ggcatcacct tcatcgcagc caagttcgat ggcatcctgg 600
gcatggccta cccccgcat c tccgtcaaca acgtgctgcc cgtcttcgac aacctgatgc 660
agcagaagct ggtggaccag aacatcttct ccttctacct gagcagggac ccagatgcgc 720
agcctggggg tgagctgatg ctgggtggca cagactccaa gtattacaag ggttctctgt 780
cctacctgaa tgtcacccgc aaggcctact ggcaggtcca cctggaccag gtggaggtgg 840
ccagcgggct gaccctgtgc aaggagggct gtgaggccat tgtggacaca ggcacttccc 900
tcatggtggg cccggtggat gaggtgcgcg agctgcagaa ggccatcggg gccgtgccgc 960
tgattcaggg cgagtacatg atcccctgtg agaaggtgtc caccctgccc gcgatcacac 1020
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ccagcacaga aacagaggag agtcccagag caggaggccc ctggcccagc ggcccctccc 1320
acacacaccc acacactcgc ccgcccactg tcctgggcgc cctggaagcc ggcggcccaa 1380
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ctgtctgtct ctccatctgt ttggtggggg tagagctgat ccagagcaca g atctgtttc 1500
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caccaggccg tcctcccggg ccctcccttg gaaacctgcc ctgcctgagg gcccctctgc 1680
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gatgaggccg ctagaggcct gaggatgagc tggaaggagt gagaggggac aaaacccacc 1800
ttgttggagc ctgcagggtg gtgctgggac tgagccagtc ccaggggcat gtattggcct 1860
ggaggtgggg ttgggattgg gggctggtgc cagccttcct ctgcagctga cctctgttgt 1920
cctcccctg ggcggctgag agccccagct gacatggaaa tacagttgtt ggcctccggc 1980
ctcccctc 1988

<210> 129
<211> 385
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(385)
<223> 5' terminal sequence. insulin -like growth
factor 1 receptor (IGF1R) gene.

<400> 129
gtggcggcac tcattgttct cggtgcacgc ccgcttccca cacgtgcttg tggcacattt 60
tctggcagcg gtttgtggtc cagcagcggt agttgtactc at tgttgatg gtggtcttct 120
cacacatcgg cttctcctcc atggtccctg gacacaggtc cccacattcc tttgggggct 180
tattccccac aatgtagtta ttggacaccg catccaggat cagggaccag tccacagtng 240
agaggtaaca gaggtcagca tttttctcaa tcctgatggc cccccgagta atgttcctca 300
ggttgtaaag cccaatatcc ttgaggatgg gtcaatcttc gaaggatgaa ccaggggcnt 360
aggtttnttg gaaggagntt ttcca 385

<210> 130
<211> 4989
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(4989)
<223> insulin-like growth factor 1 receptor
(IGF1R) gene.

<400> 130
ttttttttt ttttgagaaa gggaatttca tcccaaataa aaggaatgaa gtctggctcc 60
ggaggagggt ccccgacctc gctgtggggg ctcctgtttc tctccgccgc gctctcgctc 120
tggccgacga gtgga gaaat ctgcgggcca ggcatcgaca tccgcaacga ctatcagcag 180
ctgaagcgcc tggagaactg cacggtgatc gagggctacc tccacatcct gctcatctcc 240
aaggccgagg actaccgcag ctaccgcttc cccaagctca cggtcattac cgagtacttg 300
ctgctgttcc gagtggctgg cctcgagagc ctcggagacc tcttccccaa cctcacg gtc 360
atccgcggct ggaaactctt ctacaactac gccctggtca tcttcgagat gaccaatctc 420
aaggatattg ggctttacaa cctgaggaac attactcggg gggccatcag gattgagaaa 480
aatgctgacc tctgttacct ctccactgtg gactggtccc tgatcctgga tgcggtgtcc 540
aataactaca ttgtggggaa taagccccca aagga atgtg gggacctgtg tccagggacc 600

atggaggaga agccgatgtg tgagaagacc accatcaaca atgagtacaa ctaccgctgc 660
tggaccacaa accgctgcca gaaaatgtgc ccaagcacgt gtgggaagcg ggcgtgcacc 720
gagaacaatg agtgctgcca ccccgagtgc ctgggcagct gcagcgcgcc tgacaacgac 780
acggcctgtg tag cttgccg ccactactac tatgccggtg tctgtgtgcc tgcctgcccg 840
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ctcagcgccg agagcagcga ctccgagggg tttgtgatcc acgacggcga gtgcatgcag 960
gagtgcccct cgggcttcat ccgcaacggc agccagagca tgtactgcat ccctt gtgaa 1020
ggtccttgcc cgaaggtctg tgaggaagaa aagaaaacaa agaccattga ttctgttact 1080
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cgggggaata acattgcttc agagctggag aacttcatgg ggctcatcga ggtggtgacg 1200
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cgcctcatcc taggagagga gcagctagaa gggaattact ccttctacgt cctcgacaac 1320
cagaacttgc agcaactgtg ggactgggac caccgcaacc tgaccatcaa agcagggaaa 1380
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tccaacagct ggaacatggt ggacgtggac ctcccgccca acaaggacgt ggagcccggc 1740
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accaatgctt cagttcct tc cattcccttg gacgttcttt cagcatcgaa ctcctcttct 1920
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gaagccgaga agcaggccga gaaggaggag gctgaatacc gcaaagtctt tgagaatttc 2220
ctgcacaact ccatcttcgt gcccagacct gaaaggaagc ggagagatgt catgcaagtg 2280
gccaacacca ccatgtccag ccgaagcagg a acaccacgg ccgcagacac ctacaacatc 2340
accgacccgg aagagctgga gacagagtac cctttctttg agagcagagt ggataacaag 2400
gagagaactg tcatttctaa ccttcggcct ttcacattgt accgcatcga tatccacagc 2460
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gaaataaaat acggatcaca agttgaggat cagcgagaat gtgtgtccag acaggaatac 2700
aggaagtatg gaggggccaa gctaaaccgg ctaaacccgg ggaac tacac agcccggatt 2760
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gagtttctca acgaagcttc tgtgatgaag gagttcaatt gtcaccatgt ggtgcgattg 3240
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gatctcaaaa gttatctccg gtctctgagg ccagaaatgg agaataatcc agtcctagca 3360
cctccaagcc tgagcaagat gattcagatg gcc ggagaga ttgcagacgg catggcatac 3420
ctcaacgcca ataagttcgt ccacagagac cttgctgccc ggaattgcat ggtagccgaa 3480
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gccacactgg ccgagcagcc ctaccagggc ttgtccaacg agcaagtcct tcgcttcgtc 3720
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atcaaagagg agatggagcc tggcttccgg gaggtctcct tctactacag cgaggagaac 3900
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gacccctcgg cctcctcgtc ctccctgcca ctgcccgaca gacactcagg acacaaggcc 4020
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tacgcccaca tgaacggggg ccgcaagaac gagcgggcct tgccgctgcc ccagtcttcg 4140
acctgctgat ccttggatcc tgaatctgtg caaacagtaa cgtgtgcgca cgcgcagcgg 4200
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tgtccctgtg gccccatcca accactgtac acacccgcct gacaccgtgg gtcattacaa 4620
aaaaacacgt ggagatggaa atttttacct ttatctttca cctttctagg gacatgaaat 4680
ttacaaaggg ccatcgttca tccaaggctg ttaccatttt aacgctgcct aattttgcca 4740
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tgagcatggc agctggttgc tccatttgag agacacgctg gcgacacact ccgtccatcc 4860
gactgccccт gctgtgctgc tcaaggccac aggcacacag gtctcattg c ttctgactag 4920
attattattt gggggaactg gacacaatag gtctttctct cagtgaaggt ggggagaagc 4980
tgaaccggc 4989

<210> 131
<211> 470
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(470)
<223> 5' terminal sequence. insulin receptor
(INSR) gene.

<400> 131
gggcaacaat ctggcagctg agctagaagc caacctcggc ctcattgaag aaatttcagg 60
gtatctaaaa atccgccgat cctacgctct ggtgtcactt tccttc ttcc ggaagttacg 120
tctgattcga ggagagacct tggaaattng gaactactcc ttctatgcct tggacaacca 180
gaacctaagg cagctctggg actggagcaa acacaacctc accatcactc aggggaaact 240
cttcttccac tataacccca aactctgctt gtcagaaatc cacaagatgg gaaggaagtt 300
tcagggaacc aaggggncgc cagg aggaga aacgacattt ncctggaag gaccaatggg 360
gggaccaggg catcctgtgg aaaaatggag tttactttaa antttgctt taacattngg 420
gacnttttt tggacaagtt ttttgttgaa gttggggagc cctnattttg 470

<210> 132
<211> 4691
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(4691)
<223> insulin receptor (INSR) gene.

<400> 132
gagaaggacg cgcggccccc agcgctcttg ggggccgcct cggagcatga cccccgcggg 60
ccagcgccgc gcgcctgatc cgaggagacc ccgcgctccc gcagc catgg gcaccggggg 120
ccggcggggg gcggcggccg cgccgctgct ggtggcggtg gccgcgctgc tactgggcgc 180
cgcgggccac ctgtaccccg gagaggtgtg tcccggcatg gatatccgga acaacctcac 240
taggttgcat gagctggaga attgctctgt catcgaagga cacttgcaga tactcttgat 300
gttcaaaacg aggcccgaag att tccgaga cctcagtttc cccaaactca tcatgatcac 360
tgattacttg ctgctcttcc gggtctatgg gctcgagagc ctgaaggacc tgttccccaa 420

cctcacggtc atccggggat cacgactgtt ctttaactac gcgctggtca tcttcgagat 480
ggttcacctc aaggaactcg gcctctacaa cctgatgaac atcacccggg gttctgtccg 540
catcgagaag aacaatgagc tctgttactt ggccactatc gactggtccc gtatcctgga 600
ttccgtggag gataatcaca tcgtgttgaa caaagatgac aacgaggagt gtggagacat 660
ctgtccgggt accgcgaagg gcaagaccaa ctgccccgcc accgtcatca acgggcagtt 720
tgtcgaacga tgttggactc atagtcactg ccagaaagtt tgc ccgacca tctgtaagtc 780
acacggctgc accgccgaag gcctctgttg ccacagcgag tgcctgggca actgttctca 840
gcccgacgac cccaccaagt gcgtggcctg ccgcaacttc tacctggacg gcaggtgtgt 900
ggagacctgc ccgcccccgt actaccactt ccaggactgg cgctgtgtga acttcagctt 960
ctgccaggac ctgcaccaca a atgcaagaa ctcgcggagg cagggctgcc accaatacgt 1020
cattcacaac aacaagtgca tccctgagtg tccctccggg tacacgatga attccagcaa 1080
cttgctgtgc accccatgcc tgggtccctg tcccaaggtg tgccacctcc tagaaggcga 1140
gaagaccatc gactcggtga cgtctgccca ggagctccga ggatgcaccg tcatcaacgg 1200
gagtctgatc atcaacattc gaggaggcaa caatctggca gctgagctag aagccaacct 1260
cggcctcatt gaagaaattt cagggtatct aaaaatccgc cgatcctacg ctctggtgtc 1320
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ctccttctat gccttggaca accagaacct aaggc agctc tgggactgga gcaaacacaa 1440
cctcaccacc actcagggga aactcttctt ccactataac cccaaactct gcttgtcaga 1500
aatccacaag atggaagaag tttcaggaac caaggggcgc caggagagaa acgacattgc 1560
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<210> 133
<211> 451
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(451)
<223> 5' terminal sequence. forkhead box o1a
(rhabdomyosarcoma) (FOXO1A) gene.

<400> 133
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tacaagtgcc tcttgcccca ccccatggca gatgagtgcc tgggggggtt aacttccttc 3 60
cgtgaggcag ctggcaatgg gttatgggca ggatggggcc tttttccacc aggagaagct 420
tcccaagttg attttggatg ggctttttt t 451

<210> 134
<211> 5723
<212> DNA/RNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:pr imer

<220>
<221> misc_feature
<222> (1)..(5723)
<223> forkhead box o1a (rhabdomyosarcoma) (FOXO1A)
gene.

<400> 134
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<210> 135
<211> 466
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
<221> misc_feature
<222> (1)..(466)
<223> 3' terminal sequence. epidermal growth
factor receptor (avian erythroblasti c leukemia
viral (v-erb-b) oncogene homolog) (EGFR) gene.

<400> 135
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gccatttggc tttggcttcc ttgggaaaga agtcctgctg gtagtcaggg ttttccaggg 420
taatttggtg gctgcctttt ctgggcccag tnggaggggc ttttcg 466

<210> 136
<211> 450
<212> DNA
<213> Artificial Sequence

<220>